



HELMONT

TERNARY  
OF  
PARADOXES

1650











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HELMONT, J.B. van

- 1) A Ternary of paradoxes 1650.
- 2) Deliramenta catantki, 1650









A new, that is, into the full number of those cursed Devils  
and spirits of - for revenge, that are ever objected unto it:  
Heaven is the soul's heavenly habitation, with an high tier of  
God, and his blessed Army of Saints and Angels; together  
with deliverance, maintenance, damnation, and the visiting  
of torments of those ill-will creatures. O may the power of  
Omnipotence, upon the influence of his own infinite  
and blessed, your heart to break those chains laid in all the  
pains of our life, to precipitate us into this misery, that shall  
have neither remedy, release, nor end.

FINIS



(2)  
Deliramenta Catarrhi:

OR,  
THE  
INCONGRUITIES,  
IMPOSSIBILITIES,  
and ABSURDITIES

Couched under the Vulgar  
Opinion of  
DEFLUXIONS.

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The Author,  
That great Philosopher, by Fire,  
*Joh. Bapt. Van Helmont, &c.*

The Translator and Paraphrast  
Dr. CHARLETON, Physician  
to the late KING.

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Δεῖ δαιτυπεῖς, ἀλλ' ἔκ ἀντιδύουσι, τὰς μάλλοντας  
τάληδες κρίνειν ἡγεῖν. ¶. Arist. de Cælo, I. cap. 10.

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The Translator to the Judicious  
and ( *therefore* ) unpreju-  
dicate Reader.



*O* malevolent, severe, and uncharitable have the Censures of many ( yet such onely, I conceive, whose parcel-literature, and incapacity of the more solid and weighty Notions of Philosophy, delivered in most proper and significant language, have depraved their Appetite of Knowledge, and made them fit to digest nothing, but crude Sallads gathered in the Poets Elizium, and soft Romances, oyled with the effeminate Extracts of the Stage, and spiced with some new French-English idioms ) been of my precedent exercise ; that the World might expect from me rather a Vindication of that, then the Publication of a second, of the same kind. But as I ever levelled my endeavors at a far nobler end, then the



nothing of vulgar Applaus: so also have I declared the temper of my Genius to be too Stoical, to feel the weak assaults of that cowardly Pygmie, detraction; whom handsomely to overcome, is to scorne. For common observation will justifie, that no man ever entered the lists with that ignorant Bug-bear, but lost much by the encounter: his judgement inevitably receiving such VVounds, as the reputation of his Courage could never cure, or compensate.

Nor shall I at all recede from this Maxime, though I here adventure to professe, that next to the discharge of that duty, which, as a Scholer, I owe unto the Publique, in the Explanation, Improvement, and Communication of obscure Truths; the most forcible motive, that incited me to bestow a few recreative houres on the Translation, and marginal Paraphrase of this piece of Helmont, was to have an opportunity of letting these Semi-criticks know: that though they have privately accused, yet would it have stood more with their Honour publicly to have convicted me of such improprieties of expression, or unnatural perversions of my Authors sense, as might make me alter any thing of moment in the former, or change my stile in the present discourse.

For

For though I am sufficiently conscious to my self of more defects, and greater unevenness of my Pen, then the acutest of my Calumniators can discover; and do account it more noble to detect my own, then others Frailties: yet I dare appeal to the sober Decision of any, whose Studies hold any proportion with the Subject, (and such onely can I allow for competent Judges) whether the fine and mysterious nature of many things, treated of in that discourse, might not have suffered a grosse Eclipse, if drest in a meer-English veil? Whether it be a Crime in me to trace the footsteps of those Worthies, who have infinitely both enriched and ennobled our Language, by admitting and naturalizing thousands of forraigne Words, providently brought home from the Greek, Roman, Italian, and French Oratories; which, though in the untraveld ears of our Fathers they would have sounded as harsh, as St. Pauls ἀρρητα ρήματα \*; yet have a few years made so familiar unto us, that now even Children speak much of Latine, before they can well read a word of English? And to draw in to the Center of the scandal, whether I have merited the Epithite of λογοςειδης \* of one that praesfers

\* Ineffabilia verba. 2. Cor. 12. c. ver. 4.  
\* Qui venustatem verborum, non sensum accutatur.

*the noveltie, or affected elegance of the Phrase, to the nerves and importance of the sense; meerly because I rendered some Physical Notions in terms most amply and adequately exhibiting their qualities; and those no other, but such as are most frequent in the Schools: and attempted to paint the beauty and life of Helmonts spruce Conceptions, in Colours most strong and natural; though borrowed from the more precise, distinctive, and emphatical Tinctures of forreigne Artists?*

*I can not but applaud the Spirit, and happy Phanſie of this Tetrastick,*

*Casp. Hofmannus in præfatione sua ad lib. de Generat. Homi-  
n. ¶*

*Legisti nostros? risisti, Romule, libros?*

*Ut vidi, ut risi, Romule Dive, tuos.*

*Quæ Causa effectus paris in tam dispare causa?*

*Risisti ingenium tute, ego stultitiam.*

*And when any of the tribe of Zoilus shall shew us something of their own, I may perchance be furnished with an opportunity of Applying them.*

*But lest I fall upon a Parergie, and loosely deviate into that sinister path, which my resolutions abhor; I return directly to my duty, which is to give the impartial Reader the Reason, which perswaded me to exhibite my Explanation*



tion of Helmonts *unfrequent, and new-coyned, or new-applied Termes of Art, in Latine.* In a word, I conceived that the Quality of the Subject, intimated by each of those paradoxical Appellatives, being such as falls under the comprehension of none, but the leading part of learning, and chiefly those, who have more then looked into the mysterious Temple of Æsculapius, did necessarily require it: and that no English, how plain soever, could have driven their ample meaning into those skulls, which are so thick, as not to admit it in Latine.

As concerning the Verity of these Paradoxes, inspersed upon the ensuing Treatise, though I have formerly declared my Aversation to attempt any Commentary on, or decisive Assertion of any of his Innovations; in regard I ever found his reason stronger at Demolishing the Doctrines of the Antient Pillars of our Art, then Erecting a more substantial and durable Structure of his own, his Witt more acute and active at Contradiction, then his judgement profound and authentick at Probation: yet shall I usurp the liberty to say, that many of the Grounds of his quarrell against the Schools, in this particular of Catarrhs.

tarrhs, are sufficiently justifiable; and that if any member in the whole body of Physick needs to have its errors purged, stupidity corrected, distortions rectified, and leannesse reformed, doubtlesse this Capitall one of Defluxions may chiefly deserve the industry of the present, and gratefull improvement of the future Age. Nor should I have onely said it, had not my expectation, that some more judicious and elegant hand will shortly set about that so necessary, charitable, and honourable task, whispered me, that this difficult, and (therefore) infinitely desirable piece of knowledge, would unavoidably have suffered irreparable detriment, disparagement, and obscurity from the Contagion of my unequall undertaking. And I am bold to promise, that if any sober mind, imbued with that usefull Lesson of Aristotle, \* ἐπὶ δὲ βέλτιον ἀνάγκη ἔχει πρὸς τὸ κρίναι, τὸν ὡς περ ἀντιδικῶν καὶ τῶν ἀμφισβητῶντων λόγων ἀληθεύοντα πάντων, shall come to the dispute, denudate of all interest, and purged from all the dreggs of Adhærence to either side; he shall soon be convicted, that in all that long flux of time betwixt the daies of Hippocrates and us, no one (at least that ever came to our view) among the numerous swarm of Patho-

Metaphy-  
corum lib. 3.  
cap. 1. & de  
Cælo lib. 1.  
cap. 10.

Pathologists \*, hath discoursed of the nature and causes of such Diseases as are in vulgar practice confidently referred unto the Distillation of Rheums from the head upon parts of inferior situation, with such cleare and uncontroulable reasons, as not to have left very large gapps, for the easie illation of these scruples and objections raised by Helmont against them. In brief; whoever shall so far contribute towards the advance of his own knowledge, as to receive the Arguments here opposed to the traditional Theory of Catarrhs, with that equal justice of improving them to that height, with which they are offered; will, I doubt not, afford us his concurrent vote: that the chiefe impediment to their prevailing upon the believe of many dissenters, will be their Novelty. For hardly doe we part with those Doctrines, which instilled into our tender and unwary yeers, have grown up together with our understandings, and hold our credulities enslaved to an implicate conformity, by the tyrannous title of Præscription. A deplorable remora to the timely ex-  
*antilation* of Truth, long since discovered and complained of by the grave and yet most acute

\*Writers on the Diseases and Symptoms incident to the body of man.



and firme arguments are sometimes brought to the contrary, with great violence, we approve or reject them according to the conformity or disproportion of those Notes formerly registered. The remove of which obstruction shall be the constant businessse not onely of my studies, but also of my earnest prayer.

Quæ in Schola & Cathedra aliquando præter tationem, plerumque ad acuenda ingenia juvenutis, in theoria proponuntur, sunt toleranda : quæ vero in praxi in perniciem agrorum præscribuntur, potius execranda & damnanda, quam admitenda esse, existimo.

(hoc sum.

Quid verum, atque decens curo, & rogo, & omnis in  
Condo, & compono quæ mox depromere possim.  
Ac ne forte roges, quid me dnce, quo lare tuter ?  
Nullius addictus jurare in verba magistri,  
Quo me cunque rapit tempestas, deseror hospes.  
Nunc agilis fio, & mersor civilibus undis,  
Virtutis veræ custos, rigidusque satelles.  
Nunc in Aristippi surtim præcepta relabor :  
Et mihi res, non me rebus subjungere conor.

Poeta Philosophus ad vanda Alexandri concinnit.

VV. CHARLETON.





# The Errors of Physicians Concerning DEFLUXIONS.

## *The Summary.*

1. **W**ho is the Lord paramount of Diseases and Nature.  
 2. Some suppositions, by way of premises. 3. The conclusion. 4. Proved from experiments. 5. The explication of the Position. 6. The Lungs the part which first dyes. 7. Why the Author deserted the Schools. 8. The forerunner of miseries to old men. 9. Purging medicaments, why destructive to old men. 10. The testimonies that Physicians give of their own ignorance, Fatall: because too late. 11. That Axiome of Physicians desumed from the use of things beneficiall and hurtfull, worthy their blushes. 12. Errors of Physicians. 13. The ground of Paracelsus his inconstancy. 14. The Genealogy of a Catarrh, or Rheume, like an old wives fable. 15. Diseases imputed to Catarrhs. 16. How great calamity ariseth to mankind from thence. 17. By what means they make the sick their perpetuall slaves. 18. The ordinary subterfuge of the Schools. 19. Thirteen Positions. 20. Nineteen Conclusions emergent from those Positions. 21. By a sufficient enumeration of Parts. 22. A Dilemma. 23. Some Absurdities. 24. Ignorance in the Schools, the sole Mother

of Catarrhs. 25 The same Ignorance, the fountain of Absurdities in their method of Cure. 26. Shame, the Cause of the Schools instability. 27. A denial of principles granted in the Schools. 28. Whence heat is derived to the Liver. 29. The proof from unsuccessfull remedies. 30. the Tooth-ach examined. 31. The digestion of the Teeth and Nails, different from the Digestion of all other parts. 32. A Catarrh upon the inward parts, demonstrated impossible. 33. The Pose, or Cold in the head, described. 34. Absurdities dependent on the opinion of a Catarrh falling upon the stomach. 35. An enquiry concerning the dropping of Rheume upon the Lungs. 36. What distills from the brain, in the beginning of a Cold, and what in the continuance. 37. An Argument *ab impossibili* against the Cause of the Cough, delivered by the Schools. 38. The originall of the matter causing affections of the Lungs, declared. 39. The vanity and infertility of remedies, from want of knowledge. 40. The decoctions of China, Zarza, &c. neither dry up excrementitious humors, nor prevent their generation. 41. Some Absurdities growing upon this root. 42. What is to be observed in Affections of the Lungs. 43. The doctrine of the Schools, concerning the motion of the Lungs, false. 44. The use of the Lungs, not yet knowne to the Schools. 45. Peremtory reasons against the vulgar opinion of the use of the Lungs. 46. The error of the Schools, concerning the use of the Midwife, confirmed by 8. Arguments. 47. 7. Conclusions ensuing thereon. 48. Why the remedies of Physicians are inefficacious and barren. 49. That the means vulgarly used for the prevention and restraint of Catarrhs, are meer fopperies, and dreams worthy onely the heads of old women. 50. *Galen* wholly ridiculous in his Books of the conservation of health. 51. The Ignorance of the Schools, right worthy our pitty and tears. 52. The dissection of a living Dog, hath deceived the Schools. 53. A new Error, concerning Lohochs, or Lambativ medicaments. 54. They depend on the supposition of a Falsity. 55. Some probations. 56. Whence the delusion of Catarrhs was first introduced. 57. The refutation of an unreasonable and wild persuasion. 58. What that is, which imposeth upon our sense, under the delusive disguise of a Distillation. 59. What the second and succeeding matter. 60. Mens ignorance of the *Larex*, or fountain of serious humors, hath been the basis to the opinion of Catarrhs. 61. Preoccupation. 62. The torture of night. 63. The inconstancy of Paracelsus.

fus. 64. Those liquid parts, which are not yet made communicants of vitality in our bodies, hold no correspondence with the starrs. 65. The marrow not accountable amongst the liquid parts of the body. ¶



Reasonable it is for us, now to declare, that the large Catalogue of Diseases, imputed to a *distillation* of Rheume, from the head even to the extremity of the toes, without any obstacle impeding the descent, is an old wives fable, invented by the common *adversary* of mankind, on purpose,

lest the *Causes* of Diseases being known, their *Remedies* might at the same time be revealed. However it may be, yet at least is it hence manifested, that the Schooles are, even to this very day, seduced by the errors of the *Gentiles*, in the point of the *Generation* of Rheume, its *distillation*, *manner*, *way*, *matter*, *means*, *places*, and *organs*; as also of its *Revulsion* and *Remedies*. For false and absurd must that superstructure be, which is founded on an absurd and impossible Principle. For which reason, the vain and ridiculous hope, which is erected upon *Cauteries* and *Fontanels*, is in like manner staggered and ruined: as I shall, in convenient place, demonstrate.

*Nature* herselfe is the sole *Æsculapius* of diseases: and the *Physician* no more but her *Adjutant*; according to that worthy *Maxime* of *Hippocrates*. But the sense of that relates onely to such diseases, which *nature*, by her own single power, usually cureth. But when she hath been so fatally foyled, that she cannot by her own strength arise again to maintain the conflict; the *Physician*, elected by the immense benignity of the *Almighty Lord of Nature*, and in whose balance all diseases carry the same weight, (*i. e.*) are equally curable (such is he, who hath, among a multitude

I.

of others of the same order, obtained some one *Universal Medicine*) remains no longer her servant: but is become her *Interpreter, Rector* and very potent *Lord*. Let the name of my *Lord Jesu* be exalted to eternity, who ever vouchsafeth his munificence to *Little ones*, abjected in their own humility! For the Nature of a sick man being the chiefe receiver of *Morbifick impressions*, and the *sensitive mover* towards the contrary; the Patient must, then at least, when the diseases entertained become prevalent, yield to their conquering sword, or at best, in the future, live a *Calamitous death*, unlesse he shall be relieved and restored to his primitive integrity, by the *auxiliary* hand of the *Physician*. Yet is it not in the lot of every Physician, to arrive at *Corinth*, to ascend to that excellent knowledge: but his only, who hath the happy qualifications of a *Vocation, Election, Exercitation*, and *Commission*. For in the lesse accomplished dayes of Hippocrates, the transcendent virtues of *Catholique medicines* remained in the darknesse of undiscovery (and in truth, even in our brighter dayes, they continue but jejune, and eclipsed with prejudice and derision, amongst vulgar Physicians) upon which consideration, he is deservedly to be excused, in that he conceived the whole businesse of the conquest of diseases to lye upon the shoulders of *Nature*, as being the sole *protectresse* of life. ¶

2.

Again, I have elsewhere shewed, that, even from the first moment of the conception of an *Embrion*, there is assigned to every peculiar member one *Implantate* or *Originary Spirit*, as immediate president and Governour thereof, and another *Influent Spirit*, deradiant from the heart, as the *excicator* and assistant of the former; which yet is not determined to perfection, nor individually disposed, unlesse first subdued to a qualification requisite by the preparatory power of the *Implantate*. I have also taught, in another place, that every member enjoys the capacity of *Vegetation*, according to the virtue of its peculiar *Ferment* originally inoculated into its principles; and that, for this reason, there can be no expectance of any *transmutation*,  
· conductive



conductive to a new generation, unlesse by the mediation of that *Ferment*.

And from hence, by naturall consequence, we may understand, that *all vegetation is made by the spirits*; and that so all debility of digestion in the members doth depend upon the diminution of the *spirits* and their peculiar *Ferment*, according to that in sacred Writ: *My spirit* (the involucrum or conservatory of the Ferment) *shall be attenuated and* (therefore) *my dayes shortened*. So that a member, which in its integrity affords no visible excrement, must produce a large and constant source of unnatural humor, when once wounded, injured, diminished, or impeded in the vigour of its appropriate Ferment. And, finally, it follows from hence, that according to the degrees of the injury, and variety of Causes inferring that injury; there must be generated a diffornity and dissimilitude of excrements respectively. ¶

Diseases, therefore, have their origine, not from one fountain, particularly from the Head (from whence the Schools wildly imagine all *Catarrhs* to drop down) but from a single *Idiopathy*, or proper indisposition of every part, superinduced upon the *topickall* or domesticke *Ferments*. Thus, to example, *Wounds*, long after their sanation, break forth again, and frequently introduce durable *Ulcers*, and *Apoſtems*: and upon change of *Weather*, many years after their perfect consolidation, fall into a reincrudescence, and freshly renew their torture. Thus *Coughs*, *Pleurisies*, *Spittings of blood*, and *Erysipelous tumors*, or inflammations, have their set vicissitudes, and, after considerable intermissions, reinvade. For some excessive montain *Cold*, or other *Damp* suddenly surprising, the nightly *Aer*, marish or uliginous *Fog*, or malignant *Fume* belched from the acide bowels of *Mines*, doth frequently, with one assault, so violate and ruine the *Ferments* of the *brain*, or *Lungs*, that from thenceforward, during the whole after-life, they become the too fertile *magazines* of various excrements. After this manner also in the eyes, ears, teeth, jaws, &c. Excrements

3.

4.

- (not such as the mucous or stinky excretions of the brain) are ordinarily occasioned by the irregularity or diminution of the Ferments peculiar to those parts. So *Coughs* and *Asthmas*, or difficulties of respiration first begin : and persevere by a continued Ferment. Not, in sooth, by reason of a viscid Phlegme dropping continually from the head ; but engendered in the womb of the Lungs, by a violation of their domestick Ferment. For the Lungs more easily submit to the invasion of any forraigne injury, then the other parts of the body : in regard, *the Lungs is of all members the first that grows old, decayed, and dies.* As is manifest from the Cough generally infesting old men, and from the rattling in the throats of all dying men, though they perish by any other disease, and not by affections of the Lungs. For this is proper to the Lungs, in this respect, that they continually suck in crude Aer, and being neer to the heart oppressed, lavishly expend their own strength, and by reason of that exhaustion, decay much the sooner. ¶
5. In the first place I dissent from the Schools, because I very well know this kind of vitiosity in nature to belong to the parts *containing*, and not to the humors *contained*. For excrementitious humors of this kind contained, are certain productions, which are begotten by the *Archæum*, or vitall president of the particular parts, depraved by some noxious iniquation precedent.
6. In the second, I dissent from them also in this point, that I stand assured, that this evill is *topicall* and *primary*, and not communicated by *Deuteropathy* or *consent* with the head. For the Coughs of old men, which for the plurality discourage all hopes of restauration, arise from this root ; that in the lowest and smallest branches of the *Respiratory Artery*, or pipe of the Lungs, there doth constantly reside such a quantity of excrement, generated in the Lungs, which doth not onely obstruct the tubes or conduits : but also, by the contagion of its presence, deprave and diminish the *Local Ferment* ; whereupon there is hourly produced a new source or supply of excrements, as the  
plentifull
- 7.
- 8.

plentifull maintainance of Coughs, which in men once entered the calamitous confines of old age, are hardly cured, by remedies known to vulgar heads: in regard such remedies neither arrive at the *part affected*, nor, in troth, are they endowed with any *restauratory faculty*. These kinds of excrementitious humors, therefore, are no other but *topical defects* of the parts misaffected: and every particular part hath its particular debility, whether innate or acquire, from a diminution of its *vegetative Ferment*.

And thus it is evident, that the various streams of excrements flowing from the various parts of the body, are all derived from this one fountain. ¶

On these firm grounds I apprehend, first, *That all repetitions of Purgations, in these affections, are frustraneous and hurtfull*: in respect, they levell their power onely against the productions, or *Effects*, and not against the *Causes*; and chiefly because such viscid excrements, seated remotely from the stomach, are too stubborn and refractory to yield to the laxative operation of *Purgers*. You may pleas to adde, that although *Laxatives* may seem to have afforded ease and relief, for a day or two after their use; insomuch as the masse of crude and infected blood in the mezarick veins being voided by stool, there must of necessity succeeded the more sparing dispensation of blood through the body, and penury of nourishment in the Lungs, and by consequence a lesse quantity of excrement be rejected: yet do they, by subtracting from the necessary aliment of the whole, and by leaving behind them an evill tincture in the instruments of common digestion, every day more and more infringe the universall oeconomy of the body, and impugne the conserving vigour of nature.

This when Physicians darkly, as through a veile, discover, and remain ignorant, that they have afforded no benefit to their Patients, by the exhaustion of the laudable juices of the body, and the diminution of naturall vigour; they at length remit them to the sober rules of *Diet*, and *kitchen physick*, as the onely hopefull means of their recovery,

9.

10



very, and so leave them, by the painfull use of *Fontanels*, and reiterated moderate *Purges*, to run out their remaining sands, *medically* (i. e.) *miserably*. By which Concession, first, they insinuate that wholesome and moderate diet is to be preferred to most of those unfaithfull medicaments of the shops: and upon the testimony of their own unhappy experience, conclude, that the Patient ought to abstain from them, as hurtfull, and at best but rarely to be used. Our wish is, that now, after so many destructive exhaustions of sick mens strength, they would sit down contented, and in the future no more attempt, by the same fruitlesse means, to dreigne the hopes, bodies, veins, strength, and purses of the sick. At lest, I wish, that they would be mindfull of their own Axiome, wherein they unanimously consent, *That the chiefest indication of the cure, is to be desumed from the benefit or harme which things already used have introduced.* Which rule, although it be worthy

## II.

\* *Errhinum est medicamentum, quod naribus inditum, ex cerebro, sine sternutatione, humores & præsertim pituitam evacuat.*

\* *Apophlegmatismi sunt remedia, quæ in ore aliquandiu detenta, ejusque cavum leniter ferientia, per emissaria palati, copiosam pituitam ex cerebro deducunt; quæ sensim postea frequentius sputatione facili excluditur.*

the blushes of learned men, and onely fit for the conformity of Empyricks: yet, it may be wished, that, by the instruction thereof, they would be reclaimed from the practice of their former errors, and no longer in Coughs and Consumptions return to those inefficacious remedies, which they have observed, never to have been beneficiall to any. For then would all *Purgatives*, *Phlebotomy*, *Errhines*, \* *Apophlegmatismes*, \* *Lambatives*, *drinks of China*, *Zirza*, *Sassafras*, *Cauteries* in the Coronal suture, and other deceitfull remedies of the same order, be wholly layed aside, which are brought into use by Physicians, that they might not appeare to have received their fees for nothing. It is also to be wished, they had suffered themselves to be instructed from their own practice, that while they pointed their endeavours directly against the *Ablation*, *Revulsion*, *Derivation*, and *precaution* of secondary *Effects*, viz. the *Excrements* wept from the injured *Archæum* of the particular part: they at the same time tacitely confessed, that they neither understood their originals, nor set about the Cure of them, according to the just method of beginning at the remove of



of their *primary Causes*. And they had farther discovered, that a medical Course of Diet, is but a wild, languid, invalid and indeed desperate kind of remedy; and *Kitchen Aphorismes* too contemptible a *militia* to encounter so formidable an Adversary, already entered upon the borders of life, and ready to dissolve the *discordant Harmony* of the whole Composition, by the generall diffusion of its tyranny. No wonder therefore, if the Common people, observing the vanity of such Cures, have taken occasion to create this proverbe, *The best physick, is to take no physick.* ¶

More then once have I lamented, out of a deep Commiseration of the hard Condition of man, while I read over whole Centuries of the Councils of Physicians, and chiefly their Commentaries on the 9. *Rhas. ad Almanforem*, where they run over all diseases of the body, from the Crowne of the head to the sole of the foot; that digging into the Center of each disease (as they believe and glory) and there exploring the Grandfather, or procatartick Cause thereof, they ever and anon lay the blame on some one *singular distemper*, either naturall or acquired: but yet with such a reserve of uncertainty, that they dare not precisely determine, whether they ought to account that *distemper* for the disease, or onely for the *Antecedent Cause* of the disease, about which they Consult. But to prevent mistake, and to be sure of the right, generally in all infirmities they accuse both *heat* and *cold*. For example, in most, they cry out upon a *Frigidity* of the *stomack*, either solitary, or combined with an excessive *Heat* of the *Liver*; whence they foretell *Catarrhs* to be engendered, and maladies of those parts, upon which such rheumes shall be rained downe: and this hint they pursue unto the exploration of the nature not onely of very many *Internall*, but also of most *Externall* and Cutany defects. And with such *Theorical* and *Practical* decretals do the schools season the brains of their Disciples. For thus are infirmities of the eyes, ears, jawes, tongue, teeth, chest, arms, loyns, and thighs, charged upon the account of *Catarrhs*. Thus

12.

have Coughs, Consumptions, difficulties of respiration, Pleurilies, Inflammations of the Lungs, Apoplexies, Palies, suddain Deaths, Impostumes, Spittings of blood, found their pedigrees deduced from Distillations. Thus finally, is the stomach infested with Vomiting, Nauseousness, dejection of Appetite, and debility of Concoction: as also the Liver and Spleen become misaffected. For crude and indigestible Phlegme being dropped downe from the retort of the Head, Obstructions, Hardnesses, Droplics, Apostems, Schirrous tumors, Fevers, torments of the bowels, &c. are listed under the conduct of Catarrhs.

13.

14.

\* Principia Hypostatica sunt, quæ majori vi ac efficacia præ reliquis pollent; unde in Schola Hermetica Cheironia virilia, virtuosissima dicuntur, suntque Sulphur, Mercurius, & Sal. Sal est principium hypostaticum, cum vi fermentandi & coagulandi. Ejus signatura est, ut intrinsicus sit subtilis, metallorum instar & fixus:

To which Epidemick tradition of Catarrhs, Paracelsus, though otherwise above modesty triumphing in his invention of *Tartars*, and the 3 first *Hypostaticall Principles*, \* doth frequently subscribe, and alwayes openly acknowledge the name of *Defluxion* (*flussea*) staggering into self-contradiction, under the drunken guidance of that great Lady, *Uncertainty*.

And this fabulous scene of *Defluxions*, which indeed is very well worth our serious tears, do the Schools so polish and trim up, and deliver from hand to hand down to posterity; that it now dares plead prescription, and usurpe the sacred dignity of truth: yea common Idiots, by their own infirmities made *passive Physicians*, tire my ears with a tedious lecture of their Catarrhs. Whereupon, since it is a task extremely difficult, and such as my Genius abhors, to root out a customary doctrine from the minds of men unacquainted with more rationall wayes of learning, and in the place thereof, implant the seeds of solid truth; chiefly when vulgar heads are of that temper, that, like new vessels, they

ex trinsicus autem combustibilis et incinerabilis. Sulphur principium est hypostaticum, cum vi maturandi, tingendi, homogenea attrahendi, heterogenea repellendi, tendendi a centro ad circumferentiam, & vicissim. Hujus signatura est, ut intra sit fixum, oleaginosum sive pingue: extra inflammabile esse & fugitivum. Flamma quippe est Sulphur volatile. Mercurius est principium hypostaticum, cum vi vegetativa et instaurativa. Hujus signatura interna est fovere ignem potentem: externa vero est liquidum, glutinosum, incombustibile & frigidum esse.

Joh. Raicus tract. de podagra.

hardly

\* *Vocabulum*  
hic ab autore  
usurpatum, est  
Latria; λατρεία  
autem exprimit  
necum calum  
divinum, quo  
sensu legitur ap-  
ud Job. Evan-  
gel. cap. 16.  
λατρείαν θεός  
φερεῖν πρὸς ἑαυ-  
τόν  
est etiam servi-  
tutem, juxta  
illud Sophoc. in  
Ajace, διας λα-  
τρείας ἀπὸ θεοῦ  
ἦλθε τρέφει i. c.  
διας δουλείας:  
& illud prover-  
bium Phocylid.  
κατὰ λατρείαν  
καὶ χρόνον fer-  
vire



\* *ὀρεξις, cibi appetentia proprie dicitur, quod sen'u et Juvenal. usurpavit pro vehementi edendi aviditate, rabidam facturum orexim.*

\* *Calculi enim quandoq; in Liene reperiuntur, materia hactenus longa die in eadem coacta, & ratione interni & nativi coagulationis principij, in lapideam indurata duritiem. Hi autem ante mortem vix deprehenduntur, et medicinam spernunt.*

\* *remitte oculis ad pag. 68. in tract. de magnetica vulner. curat. & ibi fuisse explicatum invenies, quid apud medicos designatur per Catochen.*

16.

immature death. But if the stream be turned upon the stomach, then doth the stomach suffer the just punishment of its former distemper, by admitting debility of Concoction, Cruelties, Vomits, Orexies, \* or insatiate Appetites, Sweatings, fainting Pains of the moulb of the stomach, Obstructions, Lashes, durable Fluxes of the belly, violent ejections of Choler upward and downward, fits of the Colick, Atrophies, or universall leanesse from decay of Nutrition, Dropsies, Schirrous tumors, and all other defects of the instruments officiall to common Digestion: yea Fevers, Putrefactions of the blood in the veins, as also stones of the Spleen, \* Kidney, and Bladder, have their ordinary materials from the stime of this Defluxion. That if these rivulets creep into the inmost closets of the brain, then suddain death, Apoplexies, and Palsies immediately ensue: but if in the hinder part of the head, by the neck they chance to wander into the Nerves, Arteries, and Muscles, then must Gouts, Palsies, Pleuresies, and Convulsions of the receiving parts, unavoidably be introduced: yea all Chirurgicall defects, as Pains, Apostems, and the numerous progeny of Ulcers, do they father upon Catarrhs.

That if this deluge be not evacuated and dreigned by some of the forementioned sluices, but becomes a standing pond, from whose oppression the brain is not able to deliver it self, neither by the Aqueducts of the nostrils, nor the laborious pump of Coughs: Oh! then instantly follows, a stupid drowsinesse, an inexpugnable propensity to outsleep Endymion, \* Catoches, a Letbargy, Vertigo, Apoplexy, losse of Memory, and perdition of Sences.

For besides these forementioned distempers of Heat and Cold, and Defluxions necessarily resulting from thence; the Books, Orations, Councils, Conversations, Chairs and Practices of Physicians sound of nothing: and so the whole bulk of the Art of healing, seems, now a dayes, to be moved upon the slender hinges of Purgations, Phlebotomy, Scarifications, Baths, Sweatings, Cauteries, and, in short, upon no other then the diminutions of strength, and emaciations of the body, or exsicications of Rheumes.

To which end, they impose upon their Patients, the decoctions of the roots of China, Zarza, and the wood of Sassafras,



*Sassafras*, brought from the *East-Indies*, upon designe of drying up the luxuriant moisture of the brain: for the most part measuring the extent of the *Pharmaceuticall* and *Dieteticall Theory*, by the rule of *Heat* and *Cold*.

And by this means, they never release the sick out of their hands: but perpetually oblige them, like purchased *Bondslaves*, to the irksome observance of their Precepts; though with manifest despair. In regard, while Physicians remain ignorant of the fundamentals and *Causes* of the disease, and by the light of their own unsuccessfulness read the vanity of their *Operations*, they must stand convicted of the impossibility of the *Sanation*: upon this ground, that the naturall *Frigidity* of the *Stomack*, doth *Antipraerically*, or by Counter violence, impugne the *Heat* of the *Liver*; and so those remedies which would be *beneficiall* to the *Stomack*, must prove *offensive* and dangerous to the *Liver*, and so transpositively.

All which impostures, since they conspire to the extirpation of the race of *Adam*, to the desolation of *Commonwealths*, and utter oblivion of families; I could not but think it my duty (what in me lay) wholly to subvert and dismantle this execrable heresie of medical *Doctrine*: and so much the more compulsion had I upon my conscience to attempt it, in consideration that this *Pestilence* hath possessed the heads of our *Europeans*, ever since the dayes of *Galen*, \* *Proprio didactro, inquit Helmontius; Sanctus enim senat idem, quod minervalis, five primum doctrine.*

1. The *Stomack* of man, during life, is actually *Warmed*, and its interior membrane or Coate bedewed with a certain *moisture*.

2. And impossible it is, that any *aquous humidity* should be actually seething in the body, and not at the same time send forth plenty of *Vapours* from it self.

3. The superiour way from the stomach, is the *Gullet*, or *oesophagus*, being a membrane round long and hollow, as a Pipe or Cane, extended from the stomach even up unto the jawes, and in substance the same with the interior Coate of the stomach.

4. This Gullet, by the privilege of its native constitution, is ever actually *moyst*, and constantly (except at times of swallowing) actually *shut* (otherwise, distorted in avoidance of a *Vacuum*, it would laterally fall together, no otherwise then a bladder that wants some guest to fill its Cavity:) and the sides thereof mutually meet and touch each the other, by the compulsion of that necessity of Nature, which forbids a *Vacuity*. For the Gullet containing in it, neither meat, drink, nor aer, would of necessity be empty, should it remain open. But that it is not open, is evident from this, that otherwise, at the swallowing downe of every morsell of our Diet the Aer, which would be beneath the morsell, and oppose the descent thereof, were the morsell proportionate in gravity to the *renitency* of the Aer, must be rammed downe into the cavity of the stomach; and so there must follow for every morsell swallowed a *Belch*, or redischarge of that aer, by the superior outlet of the stomach. Finally, since the membrane of this Gullet is always *moyst*, the sides thereof would of necessity fall together, if not distended by some force: which is never observed in the dissections of *dead*, nor could be of any use in *living bodies*.

5. The mouth of the stomach is shut up by a *Natural* motion, and not by a *Voluntary*.

6. And *Anatomy* affords no other knowledge of the Gullet, more then that it is narrow, lockt up beneath by the *Pylo-rius* or inferior orifice of the stomach, and in the neck of man on all sides compressed by very many vessels circum-jacent.

7. The *Gullet* neither sucks in, nor contains any Aer: for by reason of its proper motion, naturall to it as a *moyst* membrane, and want of any body to distend it from within, it falls together on all sides.

8. The

8. The *Gullet* is not opened longwayes, but during the descent of Aliment. Which if very dry, makes a stand in the passage, nor easily descends, unlesse driven down by liquor superadded: which could not be, if the *Gullet* contained aer beneath the morsell, unlesse there followed a *Belch* upon the deglutition of each morsell. Yet the top of the *Gullet*, about the *Larinx* or head of the wind-pipe, is commonly open.

9. The lower end of the *Gullet* is contracted by an aliene power, and is therefore never opened but by the violence of some aliment or other tenent, either entering into, or expelled from the stomach: Or upon the knocking of *Hunger*, it may be unlocked by a *strange key*, i. e. not by its own motion, since the *humidity* of its sides naturally disposeth them to *Concidence*, or falling together.

10. No *Aer*, and much lesse *Vapour*, ariseth out of the stomach, and ascends, without giving the loud report of a *Belch*.

11. Though that heat, which is necessary to the stomach, immediately causeth the exhalation of vapours: yet it follows not, that the same heat should protrude those vapours upward, with so great violence as is required to break open the dore of the stomach, being fast lockt, and distend the *Gullet*, since any one of these contradictory *Theses* being conceded, it will be a genuine *inference*, that every man must be troubled with continuall belchings.

12. In the stomach, as in all other vessels moderately hot, every watery vapour doth sooner, upon the least compression, return to its primitive consistence, and unite again in drops; then to be of power sufficient to elevate and distend a closely compressed membrane of considerable magnitude. Where we observe, by the by, That *Vapours* are not the Cause of *Belchings*: but onely the *Gas sylvestre*, \* or a certain *Wilde spirit* exhaling from some aliment.

\* *Gas bifurcatum*, ab Helmontio nostro

*fabricatum inveni: primum scilicet Aquæ, sive Meteoron; secundum sylvestre. Gas Meteoron designat Aquam, in vaporem, per geniale aeris frigus (ubi omnia eo semel deducta consumuntur, & in pristinum aque elementum retrocedunt) resolutam. Quinam vapor alterius*

*neque*



utique sortis est, quàm vapor per Calorem suscitatus: eo itaque respectu, paradoxo licentia, in nominis magè convenientis egestate, halitum illum Gas nominavit Aulher, non longe à Chao veterum secretum. Gas autem sylvestre, est spiritus quidam naturæ hominis planè hostilis, atque à primoribus nondum cognitus; qui nec vasu cogi, nec in corpus visibile reduci, nisi extincto prius semine, potest. Corpora enim continent hunc spiritum, & quandoque tota in ejusmodi ferum halitum abscedunt: non quidem quod actu insit ipsi (siquidem detineri non posset, imò totum concretum avolaret) sed est spiritus concretus, & more corporis coagulatus, excitaturque acquisito Fermento, ut in vino fermentante, omphacio, pane, hydromelline, itemque ruber ille ex Chrysulca operante eructatus: vel additamento peregrino, ut ex auro, adjecto sale Armeniaco: vel tandem per aliquam Dispositionem Alterativam, qualis est Assatio, respectu pomi. Hujus autem ignoti hospitis tum ortus, tum hostilitatis atque implacabilis ferociæ, qua nobis insidiatur capitatiter, exegesi ulterius paulò inherendum: eà potissimum relatione, ut nedum Quidditas atque Nativitas hujus Gas innotescant ijs, quibus contigerit nondum omnia Helmontij mysteria perstruere; sed etiam ut istud epitheton (sylvestre) non incongruenter illi appensum commonestratur. Primum itaque quoad essentiam ejus quidditativam; meditare, turpiter admodum esse delusos qui credere Gas uvarum est vini spiritum in musto. Gas enim uvarum & musti, ex fermento ebullitionis concepto excitatum, est tantum in via ad vinum; non autem Vini, in sua jam dignitate constitui spiritus. Intercedens enim inter utrumque Fermentalis Dispositio, rem præcedentem disponit in sui transmutationem, ut inde aliud ens fiat. Siquidem extra dubitationis aleam est, omnem transmutationem formalem præsupponere Fermentum corruptivum. Secundò, quoad Nativitatem Gas in uva; nota. Uva illesa asservatur & exsiccatur: si vero pelis ejus semel fuerit disrupta, & vulnerata, illa mox fermentum ebullitionis concipit, hincque transmutationis initium. Vina ergo Uvarum, pomorum, baccarum, mellis, itemque flores & frondes semel discepta atque confusa, fermentò arrepto, bullire ac ferre e incipiunt; unde Gas. Ultimò, quantum ad ejus Malitiam ac feritatem attinet, œenopoli sciunt, vinorum Gas, si multa vi intra cascos coerceatur, vina furiosa, mala atque nociva reddere. Quapropter & morbidum Gas, uva affatim comestâ, pluries ægritudines anxias conscitavit. Siquidem Fermenti spiritus tumultuantur, & cum digestionis nostræ sint inobedientes, spiritui Vitali se per vim associant, imò si quid sudore tenus excerni sit paratum, id sua fermenti aciditate grumescunt, atque insignes pariunt molestias, tormina, diarrheas, dysenterias. Sed Etymi Gas explicationi satis superque hætenus insudatum.

13. That granting a Natural spirit of the yet imperfect blood in the Liver, all the veins, by reason of their constant heat, would either about the parts of the Liver, or in their capillary branches, generate Catarrhs, which the Schools have baulked in their hunting of diseases. ¶



## The Conclusions erected on the premised Concessions. ¶

FROM these *Positions*, confessed by generall *Consent*, and demonstrated by the ocular evidence of *Anatomy*, it naturally follows, in the first place

1. That no vapour can ascend from the stomach to the head; and the materiall Cause of Catarrhs, vulgarly believed, must faile, and the very groundwork of the doctrine of Defluxions be demolished.

2. If so great a mist of *ignorance* hath surrounded the world in things *manifest* and *obvious* to the observation of *sense*: what *Cimmerian* blindnesse may not be suspected, in the common theory of such things as lye more *deep* and *abstruse*, and therefore have their *Causalities* onely discernable by the opticks of the most acute *Reason*?

3. That submitting our beliefe to the doctrine of the Schools, a *healthy* and *hot* stomach would generate more and greater showers of Catarrhs, then an *unhealthy*, *weak* and *cold* one; which is point blank contraty to the opinion commonly embraced.

4. That, in order to the *Cure* of *Defluxions*, according to the consequence of their theory, we ought to endeavour the *Refrigeration*, rather then the *Calefaction* of the stomach.

5. That all men would of necessity be equally obnoxious to Catarrhs, and so continually infirme.

6. Upon this ground, that all men have their *Gullet*, *Brain*, and *Stomack* actually hot, equally moist, and constituted in the same *Figure*.

7. That every man would naturally, like swine, belch at every step he treads: since the indefinient *heat* and *moysture* must unavoydably transmit continuall Clouds of vapours from the stomach.

8. That although we should descend to allow, that a vapour exhaled from the stomach might be of force suffici-

ent to distend the Gullet; yea and be evaporated without rustation: yet would it remain of exceeding difficulty to infer an apprehension, that this vapour would not sooner be discharged by the annexed and open tubes of the mouth and nostrils, then make a long and difficult progresse up to the brain, by the narrow Meanders and blockt up avenews of a membrane. That this Vapour, steaming up from the furnace of the stomach, would necessarily carry along with it a fulsome *Hautgust* of the meat then suffering the act of Concoction, by the variety of ungratefull odours acquaint the nose with the unsavoury story of its various mutations, and be horridly offensive both to our selves and company: and thus if all those frequent belches were thus strongly perfumed by Corruption, our very *breath* also, continually blasted with them, would save us the trouble of forreigne poysons, disparage the fatall emissions of the Batilisek, and be as dangerous to Conversation, as the fumes of the *Lago di Tripergola*\* in Campania, or the sulphureous farts of our *Grandmother*, when delivered from the Colick, by the Crises of an Earthquake.

\* *Avernus, Gr.*

"*Aegros, quo  
nullæ aves ac-  
cedunt, ob te-  
trum ejus odo-  
rem: propter  
quam graveo-  
lentiam, etiam  
hic descensus ad  
infernus olim esse  
credebatur.*

*Gas sylvestre.*

9. That since the *Materiall cause* of belching is a nimble *Wild spirit*, arising for our *Aliment*, and far more subtil then a vapour; but yet doth never invade the Brain, unlesse, upon shutting the mouth, it chance to advance to the forepart of the head, through the funnell of the palat, and be thence exploded by the nostrils: assuredly, much lesse can vapours, that are more grosse and corporeal, ascend so high as to insinuate themselves into all the narrow creeks and intricate Cells of the brain.

10. That these *volatile* and *fugitive spirits*, the causers of rustation, are never carried in a direct path, up to the region of the brain; but in an oblique, leading through the organ of smelling: and therefore they never afford an odour, or become subject to the perception of the *odoratory nerves*, but when the mouth is shut, at the instant of their eruption; much lesse can a vapour from the stomach, by its own spontaneous motion, arrive at the remotest closets of the brain.

11. That

11. That though we condescend, that *Vapours*, the material cause of *Catarrhs*, may in some degree arise up to the head, at least to the organ of smelling: yet can we not conceive, that this can happen, but when the mouth is shut; and so whoever gapeth, can never be infected with *Desfluxions*, and by inference, to keep the mouth open, at the time of rustation, is a most easie and infallible precaution of the generation of rheums.

12. That since two bodies cannot so far rebell against the conserving *Laws of Nature*, as mutually to penetrate each the others dimensions, in one and the same place; and since the passage from the jawes up into the brain is exceeding narrow, oppleted (for there is no *vacuity* in those organs) barrocadoed above and so impervious (for our very breath, though violently compressed by stopping of the mouth and nostrils, cannot force open a way into the castle of the brain: ) therefore cannot a vapour, arising from the stomach, approach the *basis* of the brain. By example, a *Cane* or hollow *Tube*, that is closely luted in the upper orifice, held in an erect position over a steam of hot vapours, doth not admit them to ascend through its perforation, by reason of the *Aer*, wherewith it was before possessed.

13. Granting, that a vapour may clime upwards; yee would it not meet with any *Plane* or *Concave*, upon which it might, by *Condensation*, be reunited into drops: and much lesse any part of such figure, which resembleth the head of an *Alembick*, or *Pot-lid*. But in the *basis* of the brain, whether we gratis allow a vapour to ascend, is a narrow place, called the *Pelvis*, or *brain tunnell*; which sendeth two small *tubes*, or outlets; toward the *nostrils*, and as many backward toward the *neck*. Which two *posterior cavities* onely could the ascendent vapour insinuate it self into; and those two are ever repleted with a *mucous* or viscid excrement, and perpetually, by a kind of guttulous distillation, discharge it down into the *Palat*, as the proper *Emanatories* or dreignes of the brain, destined to the evacuation of the slimy redundant humors. And therefore albeit we concede, that a va-



pour can ascend so high: yet neverthelesse can we find no place for the Concretion of a *Catarrh*.

14. Should a vapour, if the exhalation of any such from the stomach be possible, ascend so high as this slender *Tunnell* of the brain; yea should it, in so small a place, be condensed into *rheume*, and that *rheume* drop downe again together with the *Muccus*, or indigenary excrement: yet would it prove of much lesse offence or danger, then that *muccus*, the ordinary excrement of the brain. All which the *Schools* themselves have by *Anatomy* discovered, and may (pleas them to suffer the ealie trouble of a serious pensitation.) assuredly know to be inevitable: but, alas! they have eyes, and see not; they have ears, and, we may justly feare, they will not hear.

15. That although the *materiall Cause* of *Ructation* be the *Gas* of our aliment, and impregnated with the particular odour thereof: yet the vapour of any meat whatever is converted into no other, then an *insipid* and *harmlesse Water*. By example, let any slimy juice, or spittle be artificially distilled, in any vessel, by a most gentle heat, exactly proportioned to the same degree, which is in the stomach of a living man: yet, undoubtedly, shall you draw off nothing, but an *insipid* and *thin Water*, wholly devoyd of the least glutinosity; and lesse any *salt*, *acid*, or *sharp Catarrh*.

16. That albeit the *muccus*, or phlegmatick excrement of the brain, fall down upon the jawes, and frequently introduceth various misaffections upon them, according to its various indispositions or deflexions from its naturall constitution: yet neither the *matter*, nor *defluxion* thereof can endure the reason of a *Catarrh*; no more then the *Urine*, drop by drop trickling down from the kidneys into the bladder, ought to be esteemed a *Catarrh*. Wherefore, if this *muccus*, whether *insipid*, *salt*, or *sharp*, whether *fluid* or *thick*, dropping down upon those parts, which, as peculiar *Emunctories*, are naturally ordained to the evacuation of it, may not be accounted a *Catarrh*, however evil *Accidents* it impresse upon those parts; so neither the *urine*, though it deprave the integrity of the bladder.

17. How



17. How much lesse ought the defluxion of any fictitious humor, or imaginary excrement, whose nativity and transmission are delivered to be by a manner, means, places, and voyages, naturally impossible, to be accounted a Catarrh?

18. If the Brain, while it enjoyeth the influence and irradiation of *vital heat*, be not actually cold: without doubt, the reason of the Condensation of vapours into rheume, must be staggered into an impossibility. But if it be, by some degrees, lesse hot then the other parts of the body: must we then be driven upon this absurdity, that a vapour doth, as if endowed with *sense* and an arbitrary power of *Election*, enquire out and pitch upon the coldest part, as most accommodate to its future reduction into a humor? because, by the dictates of naturall propensity, it rather desires by *coagulation* to be returned into its *primitive*, then by *resolution* to continue in the present condition?

19. Or is it driven on by the crowd of other vapours, and on all sides recoyled from the hotter parts of the body, up to the brain, as to the coldest? if so, there would be a continuall tempest in the soundest bodies, and nought but *Le-panto Gustis*, and Catarrhs in the best temperd heads: which to believe, is a madnesse beyond the power of Hellebor, and a dotage too absurd to be excused by the largest candor. ¶

20. But laying aside these *Positions* (which can, upon no necessity of nature, be verified) as worthy onely a short confutation; we come now to prove, that should all the demands of the schools, hitherto mentioned, be freely granted them: yet could they be of no advantage, as to the manifestation of the *Cardinal* point in controversie, viz. the manner, reasons, and wayes of the *Defluxion of Catarrhs*.

21. For first these rivulets of rheume cannot make their progresse to the outward parts of the head, betwixt the skull and skin: since, indeed the Schools themselves declare, that Vapours, the Antecedent matter of Catarrhs, do mount up from the Stomack to the Basis, or lowest part of the brain, and there fix upon a Plane (imaginary, nor ever yet discovered by any Anatomist) in whose lower superficies they

instantly enterprize *condensation*, and then, immediately after concretion, be rained down, like a malignant mill-dew, upon the members subjacent. Far distant, in sober truth, from this, that this forreigne adversary, this meer excrement, an obscure alien to the brain, and sole occasion of so many and incorrigible infirmities, having in the lowest *Plane* of the brain transformed it self into *Water*; should thence either penetrate through the very substance of the brain, in the grosse disguise of *Water*: or at length return again to invest it self in the thinner dresse of a vapour, and wantonly take up quarters in the forementioned *Plane*.

22. Not in the form of a vapour; for if a vapour flying up from the stomach, arrive at the bottome of the brain, and by the native cold of that part be concreted (as they say) into *Water*: beyond all dispute, by reason of the same opportunity of cold, it will continue *Water*, nor ever in that place be reduced back into a vapour again; untill Nature her self run mad, and fall upon contradictory operations, such as shall out do the confusion of her primitive *Chaos*.

23. If therefore, this Vapour be once changed into Water, by the inevitable activity of local Cold, it is too hard for the most incircumspect credulity to be perswaded, that this *Water*, of knowne hostility against the native oeconomy of the head, should be kindly invited, nay greedily drawne into the most secret and otherwise inaccessible closets thereof: much lesse that it can attaine so great thinnesse and subtilty, as, notwithstanding the resistance and compressive endeavours of non admision made by the parts invaded, to pierce through the very body of the Brain, its Membranes, Sutures, Skull, and Periostion, or coate environing the skull; then stop at the weaker counterscarfe of the skin, and there begin its *defluxion*. And, beside many other inevitable absurdities, this Water can be at most but a kinde of Rain-water; and therefore wholly unfit to be made a source of viscid Catarrhs, whose duration depends on their glutinosity: yea Catarrhs arising from this aqueous originall, would, upon the first accessse of heat, vanish by transpiration, sooner then  
the

the thinnest sweat; unlesse the *Galenists* can shew, how water made of vapours exhaled from the stomach, doth for ever after become *fixed*; as also, that by touching onely upon a certain *Plume* (which the dissecting knife hath never yet lighted upon) in the head, it doth acquire a *salt* and *sharp* tincture. Again, the *skin* surrounding the skull, being far more *rare* and *porous* then the skull (through which it is allowed to passe, by *transudation*.) must, according to the rules of probability, give way to the extermination of this water, either by insensible *transpiration*, or by *sweat*, much sooner, then imprison it so closely, as to force it, by seeking other vents, to introduce those various maladies vulgarly imputed thereunto. To which we may adde, that the skin obtended upon the skull, doth most closely and *tenaciously* adhere unto it; nor can the single *activity* of the place suffice to the *diffusion* of the rheume, and the violent *avulsion* of the skin from the bone. Moreover this Water, generated of vapours steaming from the stomach, ought, of unexcusable necessity, to have some internall *Pulsor*, or *Driver*, to ram it through the substance of the brain, membranes, skull, and periostrion. But this *driver* must not be *heat*; for then would it cease to be Water, and in a moment, re-assume the consistence of a vapour: which is wildly imagined to be condensed into water, by the frigidity of the brain. Further, Catarrhs are observed to be most frequent in *old* and infirm bodies, and *Climates* most infected with *Cold*: Wherefore this *driver*, in all probability, must be *Cold*, (which sober Philosophy affirms to cause a *Constriction* and fatnesse in the parts) whose buinesse is to protrude this water through the brain, and in sooth in the grosse form of Water; contrary to the ordinary energy of naturall qualities. And this impulsive force must be either in the *Water*, bred of meer vapours fuming from the stomach; or in the *brain*, by which it is compelled, together with its membranes and skull, to open at the advent of this Water. Finally, since this kind of rain-water, made out of condensed vapours, is conceived to hang in pendulous manner on



the lowest superficies of the basis of the brain; nor can be there detained in any quantity above a drop or twain, at most (for the narrowness of the Cavity forbids the admission of more) it must necessarily, either immediately fall downward in successive drops: or the brain must constantly play the sponge, and imbibe it drop after drop, so fast as it is condensed. Moreover, this excrementitious Water ought to have, besides the forementioned *Driver*, a *Conductor*, which may distend the skin, and in order to the generation of the Pleurisie cause an avulsion of the membrane lining the chest from the ribs, as an Harbinger to prepare a lodging for it: and as well this *Conductor*, as *Driver*, ought to be of far more power than our own indiginary *Blas*.

24. I shall at length expose at any rate, to common sale, these impostures and delusive dreams of the Schools: that no man may, the vizard of vulgar credulity being at the same time detected, longer suffer by the unfortunate purchase of false wares. Nor could I hitherto sufficiently admire, how the world could be so grossely circumvented by the tradition of *Catarrhs*: in a business, I say, so foolish, vain, and altogether impossible, that men, the Charter of whose Creation doth entitle them to *Reason*, should thus prostitute their credulities to a Legend of *Absurdities*, nay absolute *Impossibilities*, and forfeit the dignity of their transcendent endowment upon the single seduction of only one idle fault, namely *Ignorance*. That they upon their lazy and indirect disquisitions, not finding any Cause, on which to charge their large account of diseases, have imposed upon the implicate believe of vulgar heads, drowned in a deluge of stupidity, these ridiculous fictions of *Catarrhs*.

25. But the *sweat*, at least, is impregnated with a manifest *saltnesse*; upon which hint, the \* *Latex*, or *Fountain* of *serous streams* in the body, might with much more plausible reason have been adopted to the generation of Rheume, as being a very convenient mother to own such a production: then an imaginary vapour, which requires to be conducted through so many insensible ambages, and blind Meanders, and

\* *Latex*, apud Helmontium, qui humorum quaternarium adnubilare penitus contendit, est idem aquosus liquor, quem sap-



and whose possibility of existence cannot be asserted, without the joynt concession of a thousand absurdities, and bold violations of the unalterable decrees of Nature. For the accustomed *saltnesse* of the *latex*, may bear the imputation of being the *Cause of Pains* and other erratick accidents, with neerer relation to verisimilitude; then an *insipid Water*, transmitted upwards from vapours, which have no real Idea, but in the distracted imaginations of either the Contrivers, or Abettors of this Fable. Again, when this Water hath travelled through the Brain, Membranes, Skull, and Periostrion, doth it then grow weary, feeble, and unable to continue on its progresse, and penetrate the easier perforations of the skin? or hath the former laborious pilgrimage so refracted its power of transudation, and impaired its memory, that it hath forgotten the way? Why doth the skin, which by reason of its numerous evaporatories, or capillary porosities, is ordained to transmit the grosser matter of sweat, resist the tenuity of that Water, which hath so nimbly run through the impervious skull? But should this Water be once collected into a pond, under the scalp; then would it either there swell

guini ubique per omne venosum genus arctissimè associatum, scholæ nominarunt Serum; illumque tam urinæ, quam sudoris pariter atque lachrymarum communem fecere materiam. De hoc peculiarem, et nostro quidem iudicio sufficientem librum, cui inscriptio Latex Humor neglectus, paravit Helmont: quo planè ostendit, ingens ab ipsa etiam natura positum esse, inter urinam & laticem, quem frequenter extravenato sanguini innatare cernimus, discrimen; tam quoad materiæ essentiam, quam usus utriusque sive destinationes. Scopos autem sive fines, quibus inservire voluit Laticem, brevè verborum serie sic comprehendam. 1. Latex, ex sua natura pene insipidus, pro primo scopo habet, ut contemperet cruoris aciditatem, eandemque arceat; et potissimum post labores, æstus, sudores persusos, balnea, &c. nam in tanta perspirabilitate cruor valde condensatur, nisi haberet aqueam partem admixtam pro sudore. 2. Cum in omni crudiori chylo, cremore, & cruore, sit aliquid excrementum; & cruor sub digerendo salem excrementitium reservet, etiam dum in purum alimentum convertitur: est ipsi proin Latex opportunus socius, qui in se recipiat hunc salem, eumque evertat. 3. Ut materialiter causet, ne ullum densioris compaginis residuum, in ultima alimonia evaporatione remaneat: Sed simul per Diapnoeam explodatur, ratione Fermenti arterialis (ut Helmont in Blas Humano) vel ratione sudoris eluatur. Sudor namque materialiter, nil nisi Latex est, cui accessit Sal superfluous. 4. Cum oculus liquore opus haberet, ut ejus palpebra innocuè moveretur, & lingua saliva cignit, ut masticatos cibos madore temperaret; absurdumque foret, totum cibum è massa cruoris humectari: idcirco per venas Latex delatus est, unde saliva, lacryma, &c. fierent. Nam dum in Anginis, & infami Mercurij salivatione, plus iusto saliva profluit, alvus consuetò siccior evadit. Latex ergo in cruoris massa innoxius vagatur, ad loca opportuna desertur, distributivæ facultati prout auscultans. 5. Quod suo madore compescat, ne pulmo desiccetur, siccitate aeris attracti. Ad ipsius autem Authoris libellum recurrent studiosi, ubi omnium de hoc themate uberiores doctrinam habebunt. ¶

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into a tumid Cataract, or be dreigned downward in a slender thread of successive drops : or were the collection about the temples, it would soon become subject to the discovery of our touch : and should it be rained down, yet could it not avoid to infer a manifest *Tumor* of insipid water, upon the *terminus ad quem*, or part recipient. And if in small quantity, it would soon be dissipated by sweat. However, it can never fall down upon, nor be congregate amidst the *Muscles* ; since each of them is strongly guarded by the outwork of a particular cross membrane, wherewith their substance is immediately covered. Besides, there is neither way for its defluxion from the head, betwixt the skin and pericranium ; nor place to entertain it amongst the intercostall *Muscles*, in order to the generation of a *Pleurisie*. For can that *insipid Water*, which occasioned no pain or molestation, while it remained under the skin and hair of the head, within few minutes after its arrivall at the intercostall *Muscles*, kindle a violent *Pleurisie*, together with such intolerable torments ; and onely by its descent and single gravity avell the *Pleura*, or lining of the thorax, from the ribs, which is firmly annexed and immediately adheres unto them by the mediatory ligation of numerous solid *Fibers* ? Certainly, that *immunity* and tincture of implacable tyranny must be acquired from no other impregnation, then what may accrue unto it during its *Defluxion*. To proceed, no Catarrh can descend upon the *Teeth*, or impeach their *Nerves* ; which on either side from the basis of the brain are implanted into the mandible : since they are so exactly proportioned to the diameter of their receptacles, and so entirely fill them up, that there can remain none the smallest cranny for the intrusion of one drop of rheume ; and much the lesse for this, that *Water cannot enter any small perforation, that is shut beneath*. If so, unfeignedly, we have no weighty engagement lies upon our reason, to enforce assent ; that this rheume should customarily fall foule and infest one single tooth, and such onely as is *Cariou*, or hollowed by putrefaction. We shall add, that a Catarrh collected into a showre underneath the

the scalp, should, according to the *vicinity* and *rectitude* of conveyances, rather stream down upon the *Cheeks*, then the bottome of the *Gums*, through their fleshy Contexture, and persisting non-incorporate to the blood, trace the impervious paths of the nerves, through the mandible, untill it invade some one particular tooth. Yea though this phantastick deluge might be allowed to drop down from above, and so be thought the cause of pain, in the *upper* jawe: yet no man can swallow so unsavory an absurdity, as that Water, not at all participant of vitality, can by any means, or at any time, infest the *lower*. What if this vagabond rheume chance to decline towards the *eyes*, or *ears*? insooth, the malicious matter thereof must, from the conceited *Plane* of of the brain, first passe through the chief *Ventricle* thereof: and so in that royall place become a second and more fatall cataract; yea occasion suddain *Death* more probably, then an *Ophibalmie*, or bare inflammation of the eyes. Again, I well remember, that the *seat* of a *Pleurisie* is not betwixt the *skin*, or externall membrane universallly swathing the body, and the *intercostall muscles* (whither, notwithstanding, the defluxion might more directly stream down from the *periostifins* diffundente, on, then toward the internall parts) but either in the very substance of the *oblique muscles*; or between those and the *Pleura* immediately enshrouding the Chest, from which part the disease hath desumed its denomination. By what sluces therefore can a defluxion be derived from the head unto this place? I grant, indeed, by way of supposition, that a certain *Aduccus*, or phlegmatick and glutinous excrement, doth, even in Children and men of the soundest constitutions, slide down by the palat into the stomach: yet this stands in no relation at all to a *Catarrh*; nor is that mucus bred from that cried up *vapour* of the first concoction; but is an unfitable *Excrement*, begotten à *Custode errante*, \* by the *Guardian* of the brain, seduced into a perversion of its office, as hath been clearly declared in convenient place.

*Ophthalmia est annata oculi tunice inflammatione, & sanguine acri, venulas ipsius diffundente, exorta. Conside practicos.*

*sentie, Cause, modique fieri morborum, novis ejus in Physiologia th ore matis melius accommodarentur, fabricata, baud infimum tenet locum hocce, de Custode Errante, ingenium. Ut*

\* *Inaudita prius Helmotij inter Paradoxa, ex professo ut esset*



autem quàm brevissimè, & pro capiti marginis, quid sibi voluit per Custodem, et quid per eundem errantem, explicemus; animadvertendum est, quod Author, cum insignem aque cataractam è naribus, in principio Coryzæ (Frigus nuncuparunt rustici) ordinario effluxisse cerneret; et uberrimum pariter Mucci proventum a pulmonibus tussiendo explosum: ut antequam, de Catarrho ex vaporibus in planum Cerebri delatis, eodem in loco rursus concretis, quædam, et tandem guttulatim, partim per nervos olfactorios antrorsum, partim retrorsum per laryngem in exiles pulmonum tubos delabente, doctrinam pessum laret; Custodes duos, unum in Cerebro, alterum in Larynge, à sapiente rerum Parente constitutos esse, affirmare ausus est. Priori in provinciam delegatum est, ut quoties Cerebrum ab externo aliquo malo laceratum atque vitiatum fuerit, toties potestate sua alterativa, sive transmutationis energia, mucilaginosum quoddam Excrementum, ex sanguine in substantiam Cerebri mox rite assimilando, vel (ut Helmontij verbis utar) ex totalitate Alimenti, priusquam alexet, fabricet; quæ, tanquam lorica, partes frigore perculsæ circumtegantur & ab immani hoste sartæ tectæque conserventur. Atque hanc potestatem, Mucci hujus effectricem, Custodis etymo opportune quadrare, consentaneum est. Alteri, Laryngis nimirum Præfidi, minus fere idem est; puta, ut quoties aeris inexcusabilis injuria partem utramque, i. e. Cerebrum & Pulmonem adoriatur, toties è Latice & Cruore crudiori, Muccum etiam quendam, tanquam vestem, sive interstitium objiciat, in quem aer ferociens, atrocitatis aëria victrix superat: dum verò ob perfractum. Quamdiu enim Custos rectè valet, saltem multum Mucci fabricat, ut robur, primæ suæ destinationi ex voto satisfacere nequit; saltem multum Mucci fabricat, ut conceptam eluat labem, quam primitiis non fuit separando. Sed ah! ubi vel externa injuria major est, quàm quæ sinat se sic deliniri; altiusve ferit ipsam Laryngis aut pulmonum substantiam: jam cieubat Custos. Nec solum desumit auxilium abs Latice, Sed ipsam proximam alimenti substantiam alienat, transmutatque in muccosam collam; unde Phehisis mox sequitur.

I grant moreover, that in the *Gout*, and other confimilar diseases, frequently the guilt may be imputed unto a certain salt excrementitious stream; fretting the parts assaulted: but of such, onely the *Ltex*, or source of aqueous serosity in the body, is the *Mint*, *Cement*, and *Supply*; and not an ascent of vapours from the stomach into the brain, not a miscelany of non-existent juices, nor a feigned *Defluxion* of *Phlegme* mixt with *Choler*.

26. For the Schools themselves, surrounded with shame, that the *Head*, being on all sides brimfull of the brains, might be a *Magazine* for the collection of *Catarrhs*, and most *Diseases* charged upon their *Defluxion*; have (alack, and alas for wo) unjustly accused the stomach of continual smoaking with vapours, and so contributing matter to their production: but finding the stomach not-guilty in healthy men, yet presently, in the *Gout*, they incriminate upon a *Defluxion*, and as benighted in a dark mist of their shame, whisper out this



this false impeachment, nor adventure to speak it out, as alleged from the testimony of positive *knowledge*. For they at first dash, steal the *Question*, borrow a kind of acrimonious *Choler*, and salt *Pblegme* from the simple treasury of the *blood*, and leave the controverſie undecided: whether thoſe *Humors* are to be derived from the *Liver*, ſeparated, by a kind of *Critical percolation* in the veins, from the remaining laudible maſſe of blood, and ſo excluded and diſcharged upon the *joynts*; or whether a certain *Water*, tartareous *Muccus*, or other anonymous *Excrement* be tranſmitted thither from the head, underneath the ſkin. For yet they remain unreſolved; and are the more confounded in this, that they cannot manifeſt, what this cunning *Separator*, or *Winnower* of various humors, blended together in one form and conſiſtence; or what that *Conductor* ſhould be, who ſhould transport theſe humors ſeſſered from the blood, incontaminate with any alien tincture in ſo difficult a paſſage, where many more ſolid ſubſtances are to be penetrated, onely to the *Conjunctures* and *Articulations*: and now ſelect and pitch upon this, and anon upon another determinate part: but leave unimpaired the more ſteble and ſupine, and every day make a freſh conqueſt and ſubdue ſome one new joynt; yea invade that member, which is become more capable of reſiſtance by *Nodes* and *Oppilations*. Whatever, therefore, the Schools dotingly prattle concerning vapours elevated from the ſtomack, and recondenſed in the brain, as the material Cauſe of Catarrhs; let all paſſe for a Chriſtmaſſe tale, or drunken Beldams dream. ¶

27. For the *ſtomack* is never *Cold* below its native convenient temper; indeed the *Digefſtive Ferment*\* (to which, and

*alis, conſiſtens in vitali quadam Aciditate, ad tranſmutationes ciborum in ventriculo potens; ideoque & ſpecificæ proprietatis. Non eſt autem fermentum iſtud digeſtivum, in ſola Aciditate aliquali ſitum. Neque enim acetum, vel juſ Citri farinam fermentat: imo nec farina fermentata proinde eſt fermentum ſtomachicum; ſed hoc eſt Acidum eſurinum, ſtomachicum, ſpecificum & humanum; ita quidem per ſingulas brutorum ſpecies ſpecificè diſtinctum, quod ipſis ſit appropriatum. Mures namque, Glires, & Sues citius fame pereunt, quam Phyeſolum edant. In homine verò plerumque ad Generis amplitudinem aſpirat. Interim plures Caſeum horrent, vinum, lac, vel alia ſpernunt; quia non conſciant. Ideoque quæcumque luſtantur cum noſtra digeſtione, obverſantur Fermenti illius proprietati ſpecificæ, fermentumque conculcare nituntur.*

\* Fermentum digeſtivum, eſt proprietas quedam eſſenti-

not to heat, the Faculty of Concoction ought immediately to be attributed; as we have in another tract concerning that particular Theme, to ample satisfaction evinced) may suffer *Diminution*: nor can the Liver ascend to an excessive Heat, above that constant degree of *Vital flame*, which first entitled it to *Animation*; for in severity of truth, there is no other heat in our bodies, but what was first kindled in our heart by that Vestal spark, or *vital light*, which immediately and solely constituteth the *Essence of Life*. And this the reason is, why every Carcase doth suddainly grow cold, as the heart of Winter, so soon as the *Vital flame* is extinguished. \*

\* *Principium*

*istud Formale, ejus beneficio & munere Animalium Corpora, alioqui frigida, concalescunt, edendisque Vitæ actionibus apta redduntur, non esse Calidum innatum, sive Humidum primigenium insito spiritu & calore undique persusum, contra Aristotelem, ejusque ἀπολαύς, acerrimè velitatur Author: tradens passim per suas lucubrationes, pro axioma æternæ veritatis; quod in cunctis viventibus insit Lumen quoddam Vitale, immediate & fontaliter à Patre Luminum (Formas enim rerum omnium immediate à Deo creari, serio docet, in Lib. de Formarum ortu) dimanans, cordique, dum adhuc esset in utero recens embryonatum, tanquam proprio conceptaculo implantatum, in quo Vita essentialiter consistit, atque cujus marcor Senium, extinctio Mortem necessariò insert. Inquit enim, de Vita solerter perorans; Vita est lumen & initium formale, quo res agit quod agere jussa est. "Hoc autem lumen, a Creatore rebus infusum, datur unico instanti; prout à filice ignis excutitur, sub formæ identitate ac unitate clauditur, perque genera et species est distinctum. Non est autem lumen igneum, combustivum, humidi radicalis consumptivum. Tam in pisce vitale est, quàm in Leone; tamque in papavere, quàm pipere. Nec etiam in nobis deficit Calor, ob humidi radicalis consumptionem: nec vicissim humidum deficit, Caloris defectu; sed solâ duntaxat potestatum Vitalium, adeoque et luminis diminutione & extinctione. Fusorem vero Argumenti hujus explicationem me legisse memini, in tract. Humidum radicale truncupato; quorsum benevolos, avidosque doctrine Helmontij ex instituto remittendos volui.* ¶

28. But the offensive Heat of the Liver belongs to it only by Accident. For example, let a cold Thorne or needle be pricked into any mans finger (an instance frequently mentioned by me, and largely explained in my discourse of Fevers) and thereupon shall instantly ensue a violent Pulsation, occasioned by the pain, an angry Incalcescence, and Tumor of the part. \* Not because this Thorne is hot, nor that the blood then in vicinity to the wound had any immoderate effervescence before the infixation of the thorne: but that excessive Ardor is kindled upon the entrance of the thorne into the flesh.

\* *Quicquid in sanis edit actiones sanas: id ipsum in morbis*

flesh. Now let the same reason hold good, as concerning the *Liver*; for if that at any time conceive an unnatural *Ardor*, it is caused by some *Thorne*, or forreigne impression which doth not indicate, in order to the extinction of that conflagration, any *Refrigeration*, but a totall *Ablation* or eradication of it. For *Refrigeration* of the *Liver* is so far from working even a bare palliative *Cure* of this *Ardor*, that indeed it renders the mischief *desperate*, for the future.

*edit actiones vitiatas. Spiritus enim iste calefacit hominem naturaliter in sanitate, idem qui in febris aestuat. per exemplum. Spina querna digito infixa, actu et potentialiter frigida, mox in digito excitat calorem præter naturam. Non quidem, quod calidi humores affluent, quasi per spinam eo convocati, expectassent spine vulnus, & qui aliàs suis sedibus temperati sedissent. Siquidem cruor vulnere proximus, primus accurrit, aditum venienti cruori præripit. Et ipse per se quoque non calet: Sed ex gratia vitalis spiritus. Itaque inflammatio, & tumor cum pulsû duro, dolore, & calore, à solo spiritu casualiter; ab infixa verò spina occasionaliter duntaxat procedunt. Helm. de Febr. cap. i. ¶*

29. And this, I earnestly wish, the Schools may be pleased soberly to observe; as also their vain and impossible figment of the *Heat* of the *Liver*, and the manifold *Errors* in their *Method* of *Sanation*, all streaming from this fountain. May they seriously observe also, how barren and unsuccessful all such *Remedies* have proved, which have been directed (with grief I speak it) to the *Head*, *Stomack*, and *Liver*, for the *Cure* of *Catarrhs*. Manifest therefore it is, that a *Catarrh* bath, in nature, neither *Material Cause* for its Generation, Place for its Conception, *Conduits* for its Translation, *Receptaries* for its customary Admission, nor sufficient activity to make good its Penetration through the substance of the brain, *Membranes*, *Skull*, and *Perinostion*. For where in all this admirable Fabrick of the body can we find, that Nature (whose Providence can be found no way deficient) hath built any house of office, or closet, merely for the reception of *Preternatural Excrements*: nor can it stand with the lawes of verisimilitude, that a meer excrement generated in any part, should be endowed with an *Arbitrary Power* to transplant itselfe at pleasure from one place to another. And upon the concession of the doctrine of rheumes, the *Trepan* would every day, be of as much use for the letting out of *Catarrhs*, as to give vent to the *Purulent Effluxions* of wounds in the head.



30. But why should a Catarrh cease to flow downwards, immediately after the Tooth, which ailed, is pulled out? whither because it hath so soon forgotten its way thither? And if the matter thereof be originally transmitted from below, whither, I beseech you, in relation to its natural Tendency, should it then run? or upon what new part shall that ancient rivulet of rheume be diverted, which constantly used to creep into the channel of the teeth, and insinuate it selfe through those slender perforations, which the *Nerves*, as well within, as without, above as below, entirely possesse and fill up? Doth the *stomack*, forsooth, cease, or not dare to continue the exhalation of vapours, and the communication of the fuell for Catarrhs, after the drawing of a tooth? or doth the whole store of rheume, yea such as shall be generated in the future, flow forth together with the blood, at the instant of the tooths evulsion? or upon the generation of flesh in the *morice* of the drawn tooth, and so the cutting off all way of effusion, doth the Catarrh dry up? But sure the Catarrh could not attempt a passage through the rocky and *impenetrable substance* of the tooth? If not; what hindred it from swelling, by restagnation, into a necessary *Apostem* in the parts adjacent? why doth it frequently, when *one tooth* is pulled out, find a new channel and drive against *another*? Doth the evulsion of the *first tooth* turne the course of the stream upon the *second*? Doth the *conductor* of the rheum grow *blind*, and can no longer find its way to the remaining *nerve* of the drawn teeth, or at least to the *carious excrescence* that succeeds the tooth? or can it with more ease drill a hole through a second firme tooth, then passe the spongy flesh that ariseth upon the ejection of the former? why can it not constantly keep possession of that *Current* which it self digged? And so conserve an outlet for it selfe, before the new tenant of flesh take livery and seisen? Miserably, insooth, is this rheum deluded by the Chirurgeon, which thinking, according to its custome, to invade some one Tooth, and finding it removed, must be constrained to return back, by the same way it came, and execute its malice upon some  
more



more noble part; which it torments, in revenge of the affront done by the Chirurgeon. No tooth, therefore, takes by reason of a *Defluxion*: but because, upon a detection of the Gum, it becomes too *sensile*; or that, in another case, the matter of its ultimate or most depurated *Aliment*, being defectively assimilated, conceives *putrefaction* at the root of the tooth: and hence that intolerable *Paine*. 31. For the *Digestion* of the *Teeth* and *Nayls* is distinct from the *Digestion* of all other parts, in this particular; that the *Digestion* of those is performed in *domestick vessels*, or the very interior substance of each particular part; but of these in *vessels* onely *contiguous* to their roots. ¶

32. But that no *Catarrh* can fall down upon the *Inwards*, the *Stomack*, *Lungs*, *Liver*, *Kidneys*, &c. is in part already manifested, from that generall evidence alleaged against the possibility of its *materiall Cause*, *waies of transportation*, and *manner of production*: and may, in part, be evinced from this, that nothing can fall down upon the *Palat*, much lesse into the *Stomack*, contrary to our will, but what may instantly be ejected by *excreation*. For we never swallow down the naturall *Aduccus*, ordinarily dropping from the head upon the root of the tongue; but *unawares*: nor is any *Catarrh* so far participant of the power of *election*, as cunningly to lie in ambush, till we are lockt up in the arms of sleep, and then assault us when we are unfit to endeavour its evacuation. May all *Fables*, and *Dreams* of impossibilities be henceforth utterly exiled from the *Confines* of the sacred *Art of Healing*. ¶

33. Whatsoever, therefore, is distilled from the head upon the *jawes*; is the *Muccus*, or ordinary excrement of the brain, either in its *naturall* and due constitution: or altered from it, into various *irregularities*, respective to the indispersions of the *Custos*, or *President* of those parts. But this *Aduccus* is, in totality of essence, distinct from that *Excrement*, expectorated from the *Lungs*, by *Cough*. And then, what means this rash inadvertency of the *Schools*, when they direct, that, by exact inspection, we examine the spittle

by Cough, whether it be *watery, frothy, diaphanous, liquid, white, concreted, yellow, ash-coloured, or tawny?* whether *round, globular*, of a consistence fit for *impetuous defluxion*? To what purpose, say I, doe they command us to make our *augurie and explorations of the Diseases of the Chest and Lungs*; if, as themselves opinion, those excrements we spit up, be *Catarrhs*, and originally derived from the head? For so a *rheum*, following upon some *constipation of the os Ethmoides*, or spongy bone, by the *Mucous* ordinarily descending into the nostrils; would be diluted with a crude and aqueous *Mucous*; for this cause, that provident Nature would hither send a plentiful torrent of the *Latex* for the *ablution* of that, whose thicknesse and viscosity caused the obstruction. And if the *materiall cause* hereof be primitively deduced from the stomach; why, when the spongy bone is obstructed, doth the stomach of a man perfectly in health, grow outrageous, play the tyrant, and oppress the brain with too great a charge of vapours? How can those vapors, when condensed above the palate, arrive at the *odoratorie Nerves*, seated in the forehead, and there put on the form of a *salt water*, to wash and rince away the *obstruction* from the *spongy bone*? From whence can vapours, of their own nature, *insipid and harmlesse*; in their short passage only acquire so much *salt*; which they should melt and precipitate downwards together with themselves, and, by this new *acrimonious impregnation*, introduce frequent *squinancies*, and other *inflammations* of the throat and jawes? ¶

34. Why doth this *rheum*, elevated formerly from the stomach, and by no other transmutation, but only a bare *Condensation* into water (which is demonstrated, by the mechanick experiments of *Pyrotechny*, to be necessarily *insipid and gentle*) changed from its primitive consistence of a vapour; when once it falleth upon the *stomack*, occasion so many and grievous mischiefs therein: which yet not long before, during its commixture with other parts of the *Chyle*, was *gratefull and beneficiall* to the same? Whence can it obtain this *Hostility*? What, from the *Brain*, one of the most noble

parts of the body, and richly endowed with *vitall principles*? And if this *Vapour* hath only touched upon the lowest *Plane* of the brain (as themselves affirme) and instantly fall down from thence, so soon, as it multiplies up to the quantity of *one single drop*; and since no third place can be found, to deteine each successive drop: therefore can this *perversity*, or evill tincture, arise unto this *rheum*, neither from the *momentary stay* in the plane of the brain, nor from the *Contagion* of any *malignant part*, nor finally from any *seminality* or infusion of *depravity* received from thence. Unlesse, perchance, they shall be able to give in evidence, that, besides the bare *condensation* of the *vapour* into *rheum*, there intervened some *Third causality*, from which the *Acrimony*, *saltnesse*, and *virulency* of the *Defluxion* was derived: which hitherto they have neglected to prove.

35. But since the numerous *Comments*, concerning *Catarrhs* and *Pulmonary* maladies, have grown up into huge *Volumes*, *Councils*, and *Dispensatories*: I conceive it my proper businessse to declare, that no theory of the Schools was ever more full of *negligence*, *absurdity* and *danger*, then this of *Defluxions*; on this account, that hitherto they have esteemed no sinne more veniall, then *Homicide*, committed out of incogicancy and circumspection; provided that the earth cover over their Crimes, and they become excused of murder upon the allegation of some *Axiomes* of vulgar tradition. And hence, amidst my compassionate meditations, have I thought, that the Devil \* *Moloch* sits Doctor of the Chair, and hath down to our daies infatuated the world with the whimsy of *Catarrhs*. Whose materiall Cause, *Nativity*, *Place of conception*, *Efficient*, manner of *Generation*, receptary, progresse, and collection, are equally unwarrantable by truth, because absolutely impossible in nature. These absurd doctrines therefore none hath broached and promulgated, but the *old Serpent*, the Father of lies; with designe to depopulate *Humanity*. For whatever distills from the head is the native *Muccus* and pure *Excrement* of the brain, generated within its proper confines; and no forreigner brought in from the stomach. ¶

\* Consule clarissimum philadelpheum illum, Dom. Selden, de diis Syris syntag. 2. cap. 14.



36. This Muccus, is constantly *white, thick, viscid* and *innoxious*; while the *Custor*, or Lord President of the head, continues sober, well disposed, and conformes its dominion to the wholesome Statutes of its primitive trust: but when it degenerates into exorbitancies, and irregular operations, and the powers committed to its administration are perverted into abuses; then doth the *Muccus* grow *unnaturall, wild, watery, acute, salt, sharp, yellow, tenacious*, &c. and like a virulent torrent, shower down upon the palate from the funnel of the brain, by the most convenient and obvious floodgate.

37. For that matter, which in the beginning of a *cold*, or pose in the head, trickles down in the form of a thin water, is not simply and mterly the *muccus*: but *salt Latex*, where-with nature endeavours to rinse away that excrementitious *Phlegme*, which, as a forraine adversary, hath encroached upon the *spongie bone*, bordering upon the brain, and *obstructed* its sluices; as I have already hinted. Nor is that matter, which comes *yellow* and *viscid*, in the *declination* or exit of a *Cold*, the same with the first *Latex*, nor any the smallest measure of time detained and inspissated in the same place; (as the Schools notwithstanding confidently teach) since if so, the whole cavity of the skull, though all the brains were taken out, would not suffice to the reception of so vast a quantity of Excrement: but this new kind of *Muccus* is freshly created every successive moment, and differs from the naturall and *healthy Muccus*, in diversity of colour, *stinke, viscidty*, and *acrimony*. Besides, its ridiculous to apprehend this *putrid Muccus*, under the notion of an *excrement* well *concocted* and *inspissated* out of the former *Latex*; which is accidentally advenient, *præternaturall*, and depends upon a forrein *vitious causality*. Now, that the *Latex* makes the first flood in a *cold*, is manifest from this observation; that alwaies, for two daies, in every cold, the belly is more slow in the exclusion of its excrements, and the quantity of urine much diminished: which clearly evinceth that the *salt current* is in part *diverted* upon the brain. Again, this

*Latex*

*Latex* evaporated in a convenient vessell, by a gentle heat, containeth nothing in its consistence, that can be *inspissated* into a thicknesse equall to that of the *Muccus*: but how much of the *Muccus*, the *Latex* shall dilute, and rince away from the spongy bone, by its thinner stream; exactly so much, and no more of a *mucilage*, or glutinous substance, may be found in it. ¶

38. But however it be, and whatever that be which slides down from the Brain upon the Palate and root of the tongue: yet cannot the least single drop thereof enter into the Lungs, but before it descend so low, it must endanger the life by *suffocation*. For if one drop of liquor, slipping down the *aspera Arteria* or *Wind-pipe* unawares, whilst we are drinking, threaten the deplorable Fate of *Anacreon* \*: what would not so great a quantity of *rheume*, as is frequently rejected by Cough, even to the filling of severall basons in a very short time, doe as to the inference of *suffocation*? And far from the sober and rationall waies of *Probability* must his *credulity* wander, who can submit to a perswasion, that the sleep of a few short houres can insensibly convey whole basons full of *rheume* into the Lungs; and that so impetuous a flood of *Phlegme* can run down through the narrow chink of the *Epiglottis*, or *Flap* of the *Larinx*, without the manifest hazzard of *præfocation*. In the daies of yore I ingeniously confesse, being deluded by the sophistry of the schools, during my *pedantisme* and credulous pupilage, I disposed my patients, afflicted with affections of the Lungs, into such a posture, as that laying their faces downward upon their pillows, they might sleep in a prone position; with designe, that the *rheume* (forsooth) might run out by the *Nostrils*, which would otherwise have flowed into the Lungs: and upon this score, I promised immunity from the perill of *Defluxions*. But the following morne derided my ignorance and folly, with an argument borrowed from the constant perseverance of the Cough and excretion of *rheum*. For then did I discover, that an *Orthopnea*, or extreame difficulty of *Respiration*, which constrains men to fetch their breath

\* Had we said  
crosse fate, the  
Epithite had  
been more ge-  
nuine, and had  
more clearly  
hinted the  
preposterous  
rarity. For  
how unusuall  
and unnaturall  
an Accident  
was it, for the  
invincible stu-  
pidity of a  
Poet to flow  
from his *inspi-  
ration*: and a  
volatile muse  
to be conden-  
sed into eter-  
nall dulnesse,  
by the spright-  
ly fruit of the  
Vine, the same  
Inspirer, whose  
active flames  
had so often  
warmed and  
exalted her to  
the sublimity  
of rapture?

breath in an erect posture, put but a slight vauw upon the doctrine of Catarrhs, and amply convinced it as frivolous and inconsistent with truth. Since I observed many to be strangled in that prone and horizontall position; which yet was, with great gravity and confidence, prescribed by the Schools, as the only barracado, or damm, to intercept the antecedent matter of the Catarrh. Upon which observation I first built this justifiable position; *that every particular member of the body, once disaffected, doth forge and coyne a very great quantity not onely of its naturall and ordinary excrement; but also of new, alien, and adverse.*

39. Thus from the eyes, according to the variety of their disaffections, trickle down continued rills of a *purulent effluxion*, or of *salt and corrosive tears*, let forth without the key of passion: and when the Throat is blockt up by a *squinaney*, there continually hangs downe a rope of viscid Phlegme from the tongue. And upon this root grew that branch of my judgement; that *the Lungs are equally subject to the same law, with other members.* So that as often as they are assailed, irritated, injured, wounded, oppressed, or tainted by any iniquation of the *aer*, or contagion of malignant vapours belched from the sulphureous and bituminous bowels of *Mines*: so often must they produce various *testimonials* of their present *langour*, upon the credit of their own *irregularities*; and not that, upon any such occasion, those so destructive and venenate excrements can fall insensibly from the *brain* (whose integrity of constitution remains, for the most part, in such Cases, inviolate) and be received amongst the slender Conduits of the *Windpipe*. And hence grew my *Wonder* also, how the Schools could observe, that the *matter* running from the nostrils, in a *Cold*, did in the declination or *Catastrophe* much degenerate from what it was in the *Prologue* and first act; and imitate the proper and ordinary excrement of the brain: and yet, at the same time, not discover; that the same *perversion* or abuse of power lay in *Common* to the *Lungs*, as well as to other members of the body. According to their rule, whatever is avoyded from the

the



he *Lungs*, must be fathered upon the *brain*, must thence fall downe *insensibly* (ridiculous) iato the *Windpipe*, there, by a certain *pepasmus*, \* or *maturatio*, be stewed into a consistence more fit for its future exantlation, and all that while be lodged in the small-bored pipes of the *Lungs*, without causing any intense *Anhelation*, or difficulty of breathing. When (alas) it can escape the observation of no man, that a far greater quantity of matter is frequently expectorated by *Cough*, in diseases of the *Lungs*, in the space of one moneth, then the whole cavity of the *Chest* can contene. Upon which consideration, we are bold to affirme, That the *yellow, asbe coloured, and fulsom spittle of men in Consumptions*, are errors of the *Custos*, or *President of Vegetation in the Lungs*, and materially the *blood*, degenerated into a *white, yellow, stinking excrement*; \* which being thus exhausted, there must of necessity ensue an *Atrophy*, or universal *Famine* in the body. ¶

\* Πεπασμος, Maturatio: ita dicitur humorum præter naturam, morbos efficientium αλλοιοσις; quæque Alteratio in meliorem formam; ut πύξις, est naturalium concoctio. vide Hippocrat. & Galen. in epidemiis. ¶ \* Custos, qui laryngi & pulmonibus præsi-

det, ubi semel insanit, rectoque iustitiæ de tramite deviat, nedum humorem aquosum è venis advocat sui in auxilium; ast etiam ipsam alimenti proximi substantiam exhaurit, corrumpit, et in mucum infamem transmutat: tantò viz. visceris alimento proximior, quantò altius ad colorem ex flavo rutilantem, & rubedini vicinior accesserit; reditque ab illo lapsu in pristinum, dum à rufo ad flavedinem palæ, atque inde demum ad albuminis ovi similitudinem propriis appropinquavit. Hinc vice versa, in Hæticis cruentus evadit mucus, et cinerum obscurorum colorem assumit: dum ipsamet alimenti substantia abscedit transmutata, deficientemque ibidem vitæ integritatem pandit. Tunc nimirum fetidus cadaveris incipientis odor in anhelitu, deliquia prodit Archei Pulmonarij. Sed hæc ad mentem Helmontij.

40. Unsuccessfull; therefore, and deplorable are the Prescriptions of *Cephalick* remedies, in diseases of the *Lungs*; vain are the drinks of cooling *Ptisans*, vain are *Lambatives*, *Syrups*, and whatever else is swallowed down into the *stomack*: as such that must suffer a *Castration* of their *virtues* in their tedious journey, and undergo many formal transmutations, before they arrive at the *part affected*.

41. And what can smell more of the *Fool*, then to give *Decoctions* of the *Indian Roots*, to dry up rheums? for how can *China*, *Zarza*, or *Guaiaecum* conduce to *exsiccation*, when drank in a *liquid forme*? What can they dry up, which would not be more pernicious and desperate when dried up, then it could be in the more harmeleffe consistence of a *Liquor*?

Why

42. Why are such things referred to *Exsiccation*; which, in the policy of reason, want onely some *inhibitive Course* to prevent their *Causation*: and when they are stolne into existence, require not an *evaporation* of their liquid and fugitive parts; but an entire *ejection* and eradication of their whole? Why do the Schools, in most of their disquisitions, look onely open the *effects* and obvious *Exteriors*: and never pursue their search back to the *Causes* and more remote *Proto-principles*? What though these forreigne and barbarous *drugs* procure a general *sweat*, and so diminish the requisite quantity of the *Latex*, to the great and almost irreparable detriment of the Patient: do they therefore strike at the *root* of the disease, and destroy the *Cardinal efficient* thereof? while by a spare *diet*, and plentiful *sweats*, they first diminish the necessary measure of *blood*; and secondarily cause an unavoidable *leanness* of the whole body. All which the Schools have drawne into practice, upon the designe of *exsiccation* of superfluities; wildly imagining to comprehend, the *competent quantity of blood*, *Generation* of the exotick *Excrement*, and easie *Expulsion* of the same, under the single synonyma of *Exsiccation*. But (alas) will the radical *indisposition* of the Lungs be hereby *rectified*? will the *Transforming Vulcan*, or *Frantick Custos*, which doth there coyne loathsome and consumptive *Excrements* out of the laudable *blood*, be by this ineffective means subdued, lulled asleep, weakned, and reduced to its primitive sobriety, and convenient administration of its power? which enraged *Vulcan* doth never, no not when the sick are emaciated to living skeletons, remit or discontinue the execution of its fury. Turne from us, oh thou *soul of goodness*! that deplorable Calamity, which the sottish *Sanhedrim* of *Pagans*, and herd of blind *Dorados*, pretending to the sacred mysteries of *Physick*, which more study their own gains, then the safety of their afflicted brother, have drawne upon all Christendom. ¶

43. The Cardinall point of the *Cure* lyes onely in this; that the irregular and erroneous *impression* (which I call, the *Factor*

*Factor of corruption*, or *Vulcan*, resident in the Lungs) be expunged and eradicated. For that the only Publican, which by an unsupportable Excise, impoverisheth the whole Commonwealth of the body, and makes nature bankrupt, by exhausting the stock of aliment from the membranes, veines, Cartilages of the Windpipe, and all the substance of the Lungs; and converting the same into sordid and ulcerous excrements, which are continually pumpt up by Cough. But if there hath preceded an eruption of blood in any vessel of the lungs, if the matter expectorated be sanguine, and the disease hath proceeded to an ulcer; In such a case, learn the right confection of such admirable Medicaments, wherewith *Paracelsus* was wont to cure the Consumption. For those, since being taken inwardly they cure even a Cancer or any other corroding malignant Ulcer, have more then a pretence to the cure of Ulcers in the Lungs: And if any medicament drank down into the stomach, doe a cure of an ulcer in the thigh or foot: why should it not doe the same in the Lungs? But what will the Schools doe? they continue ignorant of the Causes, ignorant of the Remedies, and wavering twixt negligence and uncertainty, suspend all further enquiry; and yet confidently cry down the use of *Mercury diaphoretick*, fixed into a sweetnesse equall to that of Hony; and the volatile Tincture of *Lilium*<sup>a</sup>: as also the Milke or Element of Pearle<sup>b</sup>.

<sup>a</sup> *Lilium est Tinctura Paracelsi ex stibio.*

*Nam alcohol stibii in clauso reverberio detinebat per mensem, ut evaderet leve, & volatilem, primo album, inde luteum, ex quo rubrum, & tandem violaceum (quod Lilium Antiquorum alii nuncupant) ex quo, per vini spiritus ad xx. digitos affusus, tincturam extrahebat, separatimque postliminio spiritu, Nobilissimam Lillii Essentiam paratam esse dicebat, in omni morbo prestantissimam. Arcani hujus preparationem Paracelsus hausisse videtur ex libris Basilii Valentini Monachi, de Antimonio; qui extarunt ante plusquam 200 annos.* <sup>b</sup> *Lac sive Elementum Perlarum fit, cum Margaritæ in lacteum quendam cremorem (ex quo prius concrevisse merito credantur) repetitis multoties solutionibus, liquoris solutivi evaporationibus, & spiritus vitrioli affusione, dissolvuntur. Cum autem Helmontius, ne porci uniones projecisse videatur, ejusmodi artificium coram mundo propalare recuset; lecturi, potissimum cui Hermetis arcta intrasse nondum contigit gratum fore duximus, si rectum ac minime laboriosum conficiendi Lac Margaritarum modum, pagine hujus margini inseramus, parca verborum serie. Margaritas, in porphyrite in farinam seu levorem vitas, mitte in cucurbitam. Affunde menstruum acutum solvens (puta succum Limonum) ut duobus digitis excedat. Claude vitrum exactè.*



*Colloca in cineres calentes, ut solvantur Perlae. Si una vice id non fit, muta menstruum; donec tota substantia delituerit. Solutiones distilla ad succum. Affunde aquam stillatiam dulcem. Macera: distilla; quod ter repete, aut donec acrimonia abierit. Calc: huic affunde optimum ex malvatico vino spiritum. Digere, distilla blande. Redde alium: digere, distilla, idque repete donec oleositas spiritus Perlas in oleum mutaverit. Quod cum novo spiritu digerere, & per alembicum extrahere queas, tandemque abstracto spiritu, per se dare. Si Tabulas vis cape quantum vis: affunde spiritum Virrioli, & fiet Lac. Ex hoc secedet Calx candida. Abstrabe humorem, & cum sacchari ChrySTALLINI q. s. aqua rosea solui, fac Tabulas Perlatas.*

For unless the whole body throughout be tinged or bedewed with some *supereminent Balsam*; seldom or never are *internall ulcers* brought to *Consolidation*. And the *Lungs*, being a part that first submitteth to old age and *death*, can very hardly make a safe retreat back to their primitive strength, when once assaulted by any strong infirmity, the *Forlorn* hope of *Death*: but having their forces once routed, easily resigne to the tyranny of the Conqueror; and therefore seldom receive any recruit or assistance from *Common remedies*. ¶

44. Upon the reputation of which reason, hath the antique error of the Schools (who, sooner then they will be brought to acknowledge any *deficiency* in their blew and invalid *Medicaments*, are ready to impeach *Nature* herselfe of imperfection, and transfer the blame upon the most *glorious Author of Nature*, by implicit accusing him of *improvidence* and drowlie *omission*) succeeded even down to our daies. They positively affirm (forsooth) that the four *lobes* of the lungs are, during life, unceasingly *expanded* and *compressed*, by a short vicissitude of contrary motions, like a paire of Bellows, for the use of *Respiration*, so that the Aer inspired, is drawn only into the Lungs, but passeth no further into the cavity of the Chest. Which opinion, truly, hath been of bloody disadvantage in the method of healing: though at the same time, it served the Schools of Physicians for a weak sanctuary, and childish evasion. For upon the incessant and inexcusable necessity of the Dilatation and Constriction of the lungs, or perpetuall motion of their substance, have they endeavoured to contrive an excuse for their practice: which leaves all *Ulcers* of the *lungs*, all *Consumptions*,

*emptions* &c. as *desperate*, and beyond the art of *Æsculapius*. Well a day, as if they could cure an *ulcerous* inveterate *Cancer*, or quiet *Fistula* of the *Anus*, or *eyes*, at pleasure ! Which Error I thus encounter. ¶

45. In the *Aer* there perpetually saile up and down whole Clouds of dust atomized ; and therefore , by a continuall necessity , together with our breath we suck in whole swarms of these dusty atomes : and by consequence , the whole cavity of the Chest would in a very short time be filled with dirt, it nature had not provided us of lungs, in whose narrow Meanders, and almost impervious porosities, these Atomes of Dust might be stopt and hindered from further advance. And in this relation, the Lungs have no other way of discharging their excrements , but by *Exscreation* ; that the dust drawn in together with the *Aer* , might be pumped out of the Pipes of the Lungs , at the same instant the ordinary excrements of the chest are avoyded. A use, indeed, which hath hitherto layne obscure and neglected by the Schools ; who have unanimously denied the Lungs to be pervious. The haire, indeed, wherewith the nostrils are fringed, like a net, catcheth all the small fibres or threds of Atomes flying in the aer, and hinders their further ingresse: and the numerous folds, and annulary Cartilages of the *Aspera Arteria* , are like so many labyrinths to arrest and fix the finer dust , that it sinke not to the bottome of the Lungs. In order to our proodse, That the Lungs are immovable, we have a very sufficient argument from the forementioned use of them : and not onely that , but further also, that the substance of the Lungs is incapable of *Expansion* and *Constriction*. And therefore the Lungs of *Birds* (serving to the same common use of respiration , as well in them, as us) in regard they are, by many visible fibres, closely annexed and chained to the ribs , cannot by successive or reciprocall *Dilatation* and *Constriction*, make up the comparison of a pair of bellows. Again ; the whole fabrick of the Lungs consisteth of three large vessels, or tubes, equally dispersed through the whole ( viz. the *Arteriall Vein* , the *Venall Artery* , and

A

B

C

D

*Aspera Arteria*, or Windpipe ) of a sanguine *Parenchyma*, or blood concreted into a solid masse ; and a peculiar *Membrane*, or scarfe enshrowding all the rest. Now the three *Vessels* are *Canals* or *Conduits*, equally divaricated and distributed through their whole substance ; and the two former are ever repleted with blood, and therefore absolutely impossible it is for them to receive in any of the Aer drawn in by inspiration : but the third is ever open, filled with Aer, and so incapable of any new inspired aer, untill the aer drawn in at the last dilatation of the Chest, be first discharged down into the capacity of the Chest ; for which reason, undoubtedly the *aspera arteria*, as also the *Membrane* enshrowding the Lungs, are full of small *perforations*. For this third *Canale*, consisting also of Cartilagineous or gristly rings, made contiguous each to other, by the intervention of a horny membrane, is ever distended and open ; no otherwise then the main trunk of the Windpipe. The fourth part of the Lungs, is their parenchymatick Flesh, altogether as incapable to admit the advenient Aer. To conclude, the fifth part is a membrane, serving as a Coat to invest the whole structure. This summ'd up and considered, the result must be ; *that no part of the Lungs hath any room to entertaine any of the smallest parcell of the Aer brought in by inspiration : and that no part of them can, without violence and the dilaceration of their substance, endure the reciprocal motion of Dilatation and Constriction.* A miracle it is to me, I professe, that the Schools, notwithstanding the uncontroulable evidence of this verity, can yet snort in their inveterate Lethargy : that though they stand convinced, and allow of all our allegations, as true beyond all Scepticity ; yet doe they not, even to this very day, cease to preach up their absurd opinion, that the Lungs are continually, by a reciprocation of contrary motions, like those of a paire of bellows, distended and recompressed. Again, the third of these vessels, or fore-mentioned Tubes (though we should grant it not to be continually repleted with aer, but an absolute vacuity, unpossessed by any aer at all) in respiration (when yet it re-

E.

mains



mains open at all times, nor can the sides thereof meet together by *coincidence*, like a bladder, the cartilaginous rings forbidding it) can receive onely such a *proportion* of new aer, as may respond to its *capacity*; but since at every inspiration we draw in so much aer, as must fill a larger capacity, then the dimensions of the whole Lungs can be extended unto: it seems of undeniable necessity, that the aer is not inspired onely into the pipes of the *Aspera Arteria*, of themselves incapable of constriction and dilatation, but is carried further down, even into the cavity of the Chest. For a close, when any man hath received a wound with a dagger or poyniard, through the intercostal muscles; tis discernable with half an eye, whether or no the stab hath penetrated into the cavity of the Chest: for if yea, then is the aer, upon constriction of the Chest, exploded by the orifice of the wound in so strong a stream, that it will blow out the flame of a candle at considerable distance; which could not stand with possibility, if the aer attracted by inspiration did not passe through the Lungs into the cavity of the Chest. And the Consequence of this is, that the Lungs have no motion at all. A principal Argument, for the illustration of this *paradox*, is, that in the breast is seated a double membrane, perpendicularly intersecting the cavity thereof, from the neck down to the midrife, and therefore called the *Mediastinum*, or partition wall, provided by nature to guard the heart from the injuries of aer. This *Mediastinum* divides the cavity of the Chest into a right and left. Now manifest it is, upon the conviction of the former experiment, that the aer sucked in by inspiration, is drawne directly downe into the cavity of the Chest; as also that the Lungs are, for the same reason, devoyd of all motion. A second Argument, no lesse obvious or satisfactory, may be collected from the *purulent expectorations in Pleurifies*. For in these diseases are ever rejected by cough such excrements, as were first generated of blood extravenated and putrified, in the parts adjacent to the ribs, and membrane enshrouding the

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hollow of the Chest: and therefore it is of necessity, that the coat of the Lungs must be full of considerable *porosities*, or *perforations*, which suffice to the easie transmission of blood and thick purulent matter. All these things the Schools see, know, confesse, and write of: and yet are so effronted by cultome, that they adventure to deny, that the aer attracted by inspiration, is carried through the Lungs down into the hollow of the Chest; but affirme that the substance of the Lungs is perpetually agitated, twixt expansion and compression, like a pair of bellows. They concede, indeed, that the Lungs have many pores or small perforations, through which the extravenated blood and apostemated matter in Pleurisies are imbibed and spung'd up: but will by no means grant, that the more subtile and penetrative Aer can be transmitted through those pores into the cavity of the Chest. Nor is there, why we should wonder at this obstinate infatuation; since they speculate onely *dead* bodies, in which the pores of the membrane investing the Lungs are closed up by the condensing hand of death: and the same constantly happens in the *optick Nerves*, the *spinal marrow*, *interstice* or middle partition of the *heart*, and *orifices* of the *mesaraick veins* looking into the guts. The Lungs of any beast float upon the water, while they are boyling whole, but minced into small gobbets, they presently sink to the bottom: the reason belongs to the impletion of the *Aspera arteria* with aer. And if boyling water (pardon us the impertinency) cannot find accessse into the substance of the Lungs, while they are decocted; which way (we beseech you) can the grosser matter of a frigid Catarrh hope to force an entrance into it, at pleasure? The same is also demonstrable by an *experiment*, as easily made as mentioned. Let any man, by a strong *efflation*, breath out all the aer in his chest, as much as possibly he can; then with a ribon measure the *circumference* of his body, neer the point of the *swordlike Cartilage*, above the pit of the stomach: and again, by as strong *insflation*, fill his breast with aer, and measure it the second time, and he shall find, by comparing the different

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rent measures, that more aer is attracted into the chest by inspiration, then can be contained in the dimensions of the Lungs. And much more, when he shall allow for that proportion of aer which tending directly downwards, depresseth the *midrise* upon the *stomack*. Try the same experiment, another way; draw in so much breath, as you can; then blow it immediately forth into a bladder, and you shall finde, as before, that the *quantity of aer* inspired doth by many degrees exceed the *magnitude* of the *Lungs*. But in the mean time, be pleased to remember, that all the smaller tubes of the rough *Arterie*, as well as the upermost large canale, remain constantly wide open, as being distended by their Annulary Catilages, and must therefore be repleted with Aer, since *nature and an absolute vacuity are incompatible*. No doubt, but the belly and breast owe their *intumescence* to the inspiration of aer; if therefore the Lungs were capable of distension (which yet seems to us impossible) yet could they not be distended to a capacity sufficient to admit the tenth part of that aer, which the *Thorax* upon inspiration doth ordinarily receive; allowing for that aer, which doth depresse the *midrise* downwards, and remain in the ever distended pipes of the rough *Arterie*, in avoydance of *vacuity*. By inference therefore, the motion of the *Thorax* doth argue the motion of the Lungs unnecessary. Should we grant, that the Lungs could fill the whole cavity of the chest (which the most impudent ignorance dares not assert) then would it sound concordant to reason, that the elevation of the ribs should dilate the Lungs; but since the aer, by the laws of its constitution, is subject to *Dilatation* and *Compression* (as common Philosophy phraseth it) therefore could not the elevation of the ribs draw in a sufficient quantity of aer. Yea, since that attraction cannot but be violent (as being a *Swift Nature* is put upon, for the prevention of a *vacuum*) i.e. *à diametro* adverse to naturall and vital motion: it follows, that the *motion of the ribs is not ordeined nor conductive to the dilatation of the Lungs*. And since the Lungs have, neither in themselves, nor by infusion from any other part,

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part, any principle or *Causality of peculiar Motion*; other then that dependent on the motion of the ribs (according to the Schools: ) it results a serene and irrefutable truth, that they have no motion at all; but from the first to the last moment of Animation, continue quiet, without *variation of Figure*, or *enlargement and contraction of Dimensions*. What clearer manifest of folly and invincible dotage can there be, then to confesse, that all the twigs, or smaller Canals of the rough Arteries are constantly wide open, as being necessarily distended by the contexture of the ringlike Cartilages: and yet at the same time confidently to maintain, that all the same Canals, upon the attraction and explosion of aer, in the reciprocal motions of Respiration, are dilated and compressed? Besides all this, the Schools, in their lectures, deliver it for establisht beyond dispute, that the *Diaphragme* or midrise doth, as *prime and sole Efficient*, suffice to the ordinary use of *Respiration*: and yet anon they fall foul on their own maxims, and substitute the *intercostal muscles*, as *Coadjutors*, or *Auxiliaries*, to the performance of that office. Again, there frequently arise out of the stomach such *belchings*, as carry along with them the lively expressions of *odours* formerly received into the Lungs by inspiration: therefore are the *Lungs and midrise perspirable*, that is drild full of small porosities. In earnest, tis worthy our most passionate tears, that the Schools have, for so many ages together, unhapily mispent their sweat and oyle, in fripperies, childish pageantry, and comely Romances more wild then those of the Talmud or Aristotle. I shall urge another easie and familiar experiment; if, in a prone decumbency, that is lying with your face to the earth, you place one hand on your belly, and the other on your ribs, and at the same time draw your breath at a moderate rate, you shall then plainly perceive, that the *muscles of the Abdomen are the onely operators in the businesse of respiration*: that the belly being lifted up, the midrise is drawn downward; and consequently that the cavity of the *Abdomen* is by so much enlarged, by how much

much the plane or *diameter* of the midriff (in itself lax and undistended) is lesse then its *semicircle*, when it is drawne downward, and so much the larger, by how much the more lax the plane of the midriff is. Nay whats more, if you bind in your ribs with a streight girdle, and then fetch your breath very gently, you shall sensibly perceive the belly to be reciprocally elevated and depressed, the ribs all the while remaining quiet, without any visible motion at all; and by consequence, that the Lungs in this case, should we grant them to move at other times (which truth forbids) can remain quiet a whole day together, if the constriction last so long. But in *sighing*, *ostentation*, *sternutation*, and *intense respiration*, or panting for breath (and in no other case) the *muscles* of the *Thorax*, running along betwixt the *ribs*, are sensibly perceived to officiate, and by a kind of *substitute administration*, concur to the action of respiration. For the ribs are *semicircles* propendent downward, or arched into a lateral convexity; to each of which is annexed one of the *intercostal muscles*, which bend them upward, and by a kind of familar violence diminish their convexity in the dilatation of the Chest. And as they become greater, as to their *concave*, when they are bent into a *diminution* of their *convexity*; in that relation also do they become *rounder*, as to the figure of the chest; and so by consequence make the *cavity* of the *thorax* wider. Thus Orthopneumatick men, or such as by extreme difficulty in respiration are constrained to keep their bodies in an upright posture, heave up their shoulders high, every time they respire, by leaning their elbows or hands hard upon the pummels of their chairs; to the end, they may in some part relieve themselves in that extremity, by the enlargement of the chest, and greater detrusion of the midriff. A certain matron, wife to *Paritius*, in hard travale (for the child came forth preposterously, with the buttocks forward) by a large inspiration of aer, striving to promote her throws, and expedite the birth, broak the *membrane* environing her chest, betwixt the seventh and eighth ribs; yet without any ma-

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\* Affellando  
(*obscenium sane  
vocabulum, et  
haud raro pro  
congressu vene-  
reo apud Marti-  
alem, aliosque  
lasciviores au-  
thores usurpa-  
tum*) hic mode-  
stiori quidem  
metaphrasi,  
Panting redde-  
re placuit.

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nifest sence of pain (for a greater pain ever obscures a lesse) any *Aposteme*, or other *Accident* ordinarily subsequent upon wounds or dilaceration of that so sensible a part. Some few dayes after her childbed, as often as she held her breath long, or extended her chest, in singing, panting, &c.\* she felt a very large tumor of wind bunch up betwixt her ribs; which sunk down again, when she compressed it with her hand, and let her chest fall in again at the efflation of her breath. And from that time to her death, she never slept, but with a swath drawne hard upon that part of her breast. Which instance puts it amongst truths most manifest, that the aer attracted by inspiration is carried through the Lungs into the cavity of the chest. The same have I observed also in a very Noble Lady, who got this misfortune in her tra-vaile; that whenever she held her breath, she had one side of her throat blowne up, like a bladder distended with aer, to such a monstrous greatnesse, that no care or art could conceal it from the standers by. It makes very much also to our present purpose, that I have, with most serious attention, considered all *Pulmoniacal* and *Asthmatick* Patients, and found, that, for the plurality, they sleep with great ease and quiet on one side, and can hardly fetch their breath on the other. For we have no reason to doubt, but this maladie is *Idiopathical* to the Lungs, i. e. not occasioned by *denterapathy* or consent with any other misaffected part: as also, that in that side of the Lungs, which respecteth the prone side on which the sick man then lies, and which must in that prone position bob and fret against the membrane lining the chest, those pores are *constipated* or obstructed, through which the aer used to be transmitted into the cavity of the chest: and moreover, that the pores of either Lobe of the Lungs dependent upon or facing the downward side, are either all, or at least the greatest part of them (which we may know by observing the degrees of extraordinary respiration; for the more or lesse difficulty of respiration, may be a certain rule to direct our compute of the greater or lesser number of pores obstructed) by some lapse of providence in disordered nature,



nature, or forreigne contingency obstructed. By which Argument it is manifest, that the *Lungs* are not *Expanded* and *Contracted*, like bellows; but *pervious* and *transpirable*, by reason of their numerous perforations: through which the aer smoothly gliding into the hollow of the chest, doth constantly hold an equal proportion to the magnitude thereof, as well in its *diduction* as *contraction*. And hence is it, that men sick of diseases in the *Lungs* draw their breath more easily when they *sit up*, then when they *lie down*: for the *Lungs*, when they hang directly downward in a free *pendulous position*, have on all sides those pores open and fit for the *transvection* of aer, which have not yet submitted to the oppression of *obstructions*.

48. Beyond all excuse therefore do the Schools erre, when they deliver, as an oraculous truth, that the *midrise* is the sole and prime Motor of the *Lungs*; and, in that relation, the proper and principiative efficient of *Respiration*. More particularly, that when the *midrise* doth contract itself towards its own Center; it then makes the *Expiration*; but when it relaxes toward the *Circumference*, the *Inspiration*: and so the quantity of aer inspired must in exact proportion respond to the measure of the *midrises* expansion or relaxation. Our reasons these, 1. Since all *voluntary Motion* is performed by a *Muscle*, as the part solely and principally adapted by *Nature* to that action, by a *retraction* of the *taille* toward the *head* thereof; therefore, if their opinion stand allied to verity, must the *midrise* be a *prime*, *beterocline*, and most *principal Muscle*, and the *head* thereof seated in its *Center*. 2. If the *midrise* be an organ primarily executive of motion; then, though the *Muscles* both of the *Abdomen* and *ribs* cease from all *Contraction* and *relaxation* of themselves, would the *midrise* maintain the successive motions of *respiration*, by its own *single power*: Which experiment positively denies. 3. Yea the *muscles* of the *Abdomen*, which are ordinary *muscles*, would have no motion proper to themselves, but be moved, at second hand, by the previous motion of the *midrise*. 4. Vain and uselesse would

the contrivement of nature be, and her architecture imperfect in superfluity, in making the abdominal muscles; and the belly might have as conveniently been cloathed with the single coat of the Carnous Membrane, as with the bombast and duplications of so many muscles. 5. Since every organ of Voluntary motion doth execute its function by *Traction*, or drawing the part, into which its *tendon* is inserted, towards itself, the breast, according to this error of the Schools, would be drawne very much inward by the *Traction* of the midrife, and the *wast* convelled into the dwindling figure of an Houreglasse. \*

\* *Clepsydra in archetypo: quæ est organum quoddam artificiale, quo ex aqua, de vitro in vitrum deorsum, per ex-ile foramen, guttulatim destillante, horas metiri solebant antiqui. Hodie vero, hominum ingenis ad nobiliores machinationes feliciter proventus, exolevunt Clepsydræ; hisque supervenere Clepsammidia; quibus horas mensuramus per effluxum Arenæ: ut & Horologia Automata, quorum orbiculi serratim dentati (græce τροχάλια, ut Arist. Mechanic.) sese mutuo protrudentes, vel à chalybe arcum tenso, & machine infixo, vel ponderibus appensis circumgyrantur.*

49. Hence upon rationall deduction I conclude, 1. That the true and proper use of the Midrife hath hitherto remained unknown. 2. That the use of the Lungs hath never yet been met with, by the too lazy and jejune scrutinies of the Schooles. 3. That the exact manner and reason of Respiration hath also escaped the vulgar exploration of Anthropologists. 4. That Anatomists have never made a just and perfect discovery, which are the prime and principall instruments of respiration. 5. That the muscles of the Abdomen doe alone suffice to maintain ordinary and moderate respiration. 6. That the Lungs are never moved by any naturall expansion and Compression of their substance; but serve onely as a sieve, or *pecolatory*, for the sequestration of the atomes of dust from the most simple and pure aer, which is immediately transmitted into the concave of the Chest.

Chest. 7. That the deplorable difficulty of curing diseases in the Lungs, especially where their *Continuity* is *infringed*, doth not arise from this, that they are unceasingly agitated by a vicissitude of *Compression* and *Expansion*, and in that respect destitute of that rest and *quiet*, which is necessary to the *consolidation* of a *disunion* (which hath ever been alleaged and admitted as an excuse for the languid and ineffectuall operation of vulgar remedies) but from hence, that the small *apertures* or extreme orifices of their perforations are blockt up by *obstructions*, whose remove is a task too difficult for the infirm fingers of common pulmonary medicaments, and onely to be hoped for from the Herculean energy of some *Chymicall Panchreston* \*. To which we may subjoyn, that nothing, besides *aer*, can arrive at the extreme pores of the Lungs, and that *aer* is, by reason of the *oppilations*, there arrested, and imprisoned, and doth also by degrees *exsiccate* the obstructing glutinous humors. From which depraved root there springs up a whole grove of preternaturall *productions* which in their maturity put on the destructive blossomes of *Aridity*, *Acrimony*, and *Malignity*: and in the *summer* or ripening of these *seeds* of evill (which must, alas, be the *autumne* of life) there must grow a *racemation* or bunch of desperate *Accidents*, such as extreame anxiety in respiration, *Apostems* of the Lungs, exesion or corrosion of their vessels, spitting of blood, ulceration, consumption, and in the catastrophe Death. For let us suppose, that all the *aer* attracted by the expansion of the Chest, is ordinarily transmitted into the capacity thereof, through a *thousand* minute *tubes* or divarications of the *Aspera Arteria*; and that this just number of perforations in the Lungs is sufficient to the conservation of health, as to the interest of *respiration*: if therefore but a *hundred* of these be stopt up by *obstructions*, then must the party suffering this constipation, become, by one *tenth part*, more shortwinded, in long and intense motion, or ascending up hill, then otherwise he ought to be. ¶

\* An universall Medicine.

50. From this advantage we have a cleare and un-interrupted



rupted prospect into the field of *Pulmonary remedies*, and may at first glance discover, that *Syrups, Lambatives, Loochs, &c.* are lame and despicable relieves of nature; since they never arrive at the parts distressed, but are either diverted into the stomach, intestines and other places wholly unconcerned in their operations; or so impaired in their activity by a tedious pilgrimage through many Concoctions and transmutations, that they lose their primitive faculties, and grow too languid and evirate to encounter the disease. Nay what's more sad, that if they did arrive in the zenith of their *seminal powers* and unrefracted qualities at the camp of the disease: yet, like cowardly and treacherous *Auxiliaries*, they would aggravate the charge of Nature, and ruine that part, whose assistance they pretend. Here also our enquiry meets a handsome argument, why no one of the forementioned infirmities of the Lungs may hope a Cure from any Plant in the Physicians garden, or Confection in the Apothecaries shop; unlesse *Fire*, discreetly governed by the learned hand of *Chymistry*, and blown into a temper suitable to that *Ignis non lucens*, or invisible flame irradiating all our fabrick of frigid Clay, shall graduate some medicament into a Noble *Entelechie*, and make its balsame friendly and familiar to the principles of life, as natures own.

§ I. But as for those *Precautions* of *Eatarrhs*, which enjoin the use of *Coriander seed*; and other such vain sopperies, after supper, for the prevention of fumes arising out of the stomach; how much more worthily; in the judgement of sober reason, doe they deserve our pity, then our confidence? For if the generation of vapours, from their causes (*humidity* as the material, and the innate heat of the stomach, the efficient) and their ascention be naturall; what can *Coriander* doe to hinder that these naturall effects should not follow on the neck of their causes? Can *Coriander* interspersed upon boyling water in any small neckt vessell, impede the exhalation or ascention of vapours out of the water? At the same rate let us prise those magnified trifles and serious nothings of the Schools, when they with great ceremony

ceremony prescribe, that the haire must not be kembed, nor the head rubbed at *night*, but *morn* (forsooth) not towards the *forehead*, but *backward*; left Catarrhs, obeying the *positional friction*, be drawn forward. Nor doe we want just cause for our complaint, that both Gates leading into the divine Temple of *Æsculapius* are blockt up by heaps of frantick *Chimæra's* and the fabulous traditions of doting bel-dames; since the true and proxime causes of diseases have to this very day, remained lockt up in the dark of undiscovery: nor have those *Moles in Philosophy* ever digged deep enough into the Center of their *Seminalities* and first principles, or sweat sufficiently in their exantlation.

52. For how frivolous is the doctrine of *Galen*, through all his five books of the *Conservation of health*? In all which long and hollow tract you shall hear of nothing, but the echo's of *Baths, Frictions, and Apotherapia*\*, or *Uction* after violent and athletick exercise. And though I have with commiseration observed the poverty and barrenesse of *Galen* generally diffused through all his longwinded discourses; yet in no one piece of his voluminous workes have I more manifestly taken the altitude of his *wit*, then where with extreme seriousness, he prescribes the severall distinctions of *positional Frictions* to be used (forsooth) *longwaies, transverse, oblique, and circular*; and these, like the ridiculous Ceremonies of *Necromancers*, to be observed with punctual and strict obedience, under no lesse then capitall penalty. For *Rome* was infested with fewer diseases, and those more gentle and benigne, and warmed herselfe at fewer funeral fires, in her first five innocent and growing Centuries; then after she had triumphed over conquered *Greece*, and among other Trophies brought home the fatall and infectious *Libraries of Physicians*. And all *Europeans*, who harbour few or no Phylicians, will, without any reluctance to their experience, confirme the same.

\* Apoteraxia inscribitur exemplari Elzeviriano; sed vel ex Helmontii calamo ad alia ocyus festinante, vel compositoris incivria, hoc vitium suum duxisse originem consentaneum est. Nul-lum enim vocabulum tale (quod sciam) apud Galenum reperire est: Apotherapia autem quam plurimis in locis ejusdem lib. de Cons. sanic.

usurpatur, cujus proprius scopus est, ut lassitudinem, que immodico exercitio succedere solet, admoto oleo, submoveat atque prohibeat. Consul. Galen. lib. de san. tuend. 2. cap. 6. & 3. cap. 2.

53. The Schools with serious gravity wonder, that so vast a quantity of *Mucous*, or glutinous gelly, should ordinarily be avoyded by stool, upon the operation of *Coloquintida*; and yet that the quantity of *expectorations* in diseases of the Lung, should be thereby no whit diminished: and so while with insolent ostentation, they glory that they have found out the *Antecedent cause of Defluxions*; at the same time enchanted by the effects of *Purgatives*, they will by no force of argument be brought to confesse the falsity of their *Pblegmatick* axioms. Now *Coloquintida*, *Scammony*, *Elatarium*, &c. dry the body more in one day, then the *Decoction of China* can in three moneths. What benefit then can, in reason, be hoped from *China*, where more exliccating *Purgatives* confesse their invalidity: and their use must needs be *horrid*? From this, who so purblind in his understanding, as not to see, that the pædantick Schools, adhering to the doctrines of their *Ancestors*, have set up their rest in this, that *the writings of the antient Ethnick* ought to be their *Ne ultra in Philosophy*; that they are not obliged to any deeper disquisitions, or further explorations, but onely to order their Cures, according to the antique and thredbare *Theorems of Physick*. And though they cannot but observe their *Practice* shame their *confidence*, and the *successes* fall short of what their specious *Canons* promise: yet doe they not blush to veile over their bloody ignorance, nor feel compunction at their inhumane resolve, that they had rather their afflicted Patients should still remain suspended betwixt the calamities of the *Disease*, on one side, and the more murderous tortures of their *Purgers*, on the other; then take the pains to study and explore any more rational and probable means of their redresse. And, sober truth makes me confesse it, so many Myriads of *IncoGITancies* and *Absurdities*, could never have thus long continued in the Schools, consisting of men so acute, judicious, prudent, and experienced (among whom I as willingly as justly confesse my selfe the most despicable and unworthy) had they been pleased to abate any thing of their implicate *subscription*,  
and



and recede the leſt ſtep from the *Axioms* of *Pagans*. But, alas, they are cloſely beſieged by the grand enemy of primitive truth; who holds them captived to the tyranny of his *Deluſions*, by the chain either of *Arrogancy*, *Incircumſpection*, *Cruelty*, *Avarice*, *Lazineſſe*, *Stupidity*, or, in fine, of ſhame to be reformed. Good Jeſu! when wilt thou be pleaſed to caſt this devil out of the Schools? when will the meaſure of theſe fatall evils be full, and the Vintage of theſe ſoure Grapes come; that, at length, by the comfortable ſunſhine of thy truth, this *Ægyptian* night may be exhaled, and this miſt of horrid calamities that ſits heavy on the heads of all the wretched ſonnes of *Adam*, be diſpelled? Thy answer is, there can be no remedy for his blindneſſe, who wilfully and ſtubbornly ſhuts his eyes againſt the light of a confeſſed verity. Therefore,

*Juſt God!* all things are juſt, thou doſt approve;  
 Thou unmov'd *Rule of Truth*, and *Fount of Love*;  
 But ſince we ſcorn'd thy wiſer *Laws*, to obey  
 Wee'r made to *Fools a Scorn*, to *Quacks a Prey*.

54. Some *Anatomiſts* there are who have diſſected a living *Dog*; and when they came to the *Larynx*, drenched him with milke, or other broth, tinged with *Saffron* or *Bole Armeniack*, to the end they might perceive whether any part of the liquor entered the lungs: and found that a very ſmall quantity thereof gave a tincture to the ſides of the *Aſpera Arteria*. On this they cried out, that there muſt be an inſenſible and ordinary deſcent of excrements from the brain into the Lungs; and enacted for an eſtabliſht truth, that *Lambatives*, ſince they are carried immediately into the *Larynx*, and thence ſlide down into all the moſt ſlender and remote tubes of the *Aſpera Arteria*, muſt be the ſole and extreme remedy of *Conſumptions*, and the moſt prevalent means to Conſolidate *Ulcers* in the Lungs. An experiment, in troth, of very much cruelty to the *Dogge*; but of farre more cruelty and unhappy conſequence to *Man*: ſince, at the perſwaſion hereof, the Schools have delivered it from hand

\* Hic Author  
proculdubio al-  
ludit ad λα-  
μπνοφιας,  
five λαμπν-  
δοφιας

Antiquorum, à Paulan. sic descriptam. In Academia Promethei ara est: unde homines in urbem accensas lampadas ferentes decurrunt. Sequiturque victoria eum qui facem accensam conservavit; nam si extincta fuerit, alteri succedenti ea traditur: eademque ratione tertio successor, si secundus non pervenerit ad metam, cum lampade accensa. Quod si nemini ardentem deferre licuerit, palma in medio relinquitur.

For, First, what can they expect that *Syrups* and *Lambatives* should doe, in the slender branches or divarications of the *Aspera Arteria*, more then inevitably introduce the mischief of *obstructions*? To what end, therefore, should these fulsome *Loochs* naturally and ordinarily affect that way of descent into the lungs, or be transmitted thither, or there entertained? since in that place they can neither be digested, nor changed into good and nutritive or balsamicall juyce; nor yet conduce to the cure of either the purulent effluxions from ulcers, or viscid *Mucous* expectorated. And further, if some part of our liquor should ordinarily drop into the lungs, then would the ordinary *spittle* of healthy men savour of the *broths* eaten, or *syrups* lickt down. And although our first *spittle* sometimes relish of the *syrups*, or other liquid remedies, newly swallowed down; yet such ariseth not from the *Lungs*, but *Palate* and other parts seated in vicinity to the jawes: nor doe the succeeding salivous rejections, for that reason, confesse an iniquation or tincture of such *Lambatives*, as in another case the succeeding spittle returns fuliginous exhalations or *fumes*, received into the *Lungs*, a good while after their first admission. Again, were this feasible, then would any man, who should lick up severall ounces of Syrup, in one evening, be, ere many minuts, reduced to the bosome of his cold grandmother, by the inevitable destruction not onely of an *Asthma*, but even of *suffocation* ensuing; for a part of those *Syrups* must fill up and choak the great pipe or cavity of the rough arterie. Seriously, our wonder may be excused, if we stand amazed, how

how the Schools, seduced by so blew and dull an experiment of a Dogge, have baulked the observation, that this coloured broth, or Milk died with Saffron, was rapt down in the Larynx, not by the ordinary way of Deglutition; but *unawares* and *preposterously*, the poore distracted animal howling amidst his torments, and so opening the *Epiglottis*. Not that the same is done of custome in *beastly*, or frequently observed in *rheumatick* persons. For precisely, if a man in an extreme fit of the *stone*, endeavouring to make water, doth chance unwittingly to open the porthole of his arse, and confront an Irish man; must it therefore be the proper function of the *Sphincter* of the bladder, when it relaxeth it selfe, and gives way to the efflux of the urine, ordinarily also to unlock the sphincter of the *port Æsquiline*? For tis no rarity, for parts of the body, when their *œconomie* is infringed and disturbed into tumult and confusion, by excessive *pain* and torture, to perform their functions *depravedly*; and draw other parts also, to which they are allied by vicinity of situation, or connexion, into the same disorder and irregularity. Their believe had been more securely placed upon that *History* of one suffocated with a small fether, and of another with a *baire*, unfortunately slipping into the rough *arterie*. For so had they stood confirmed, without dispute or *hæsitancy*, that the *Lungi* can never admit any *forraigne* intrusion, or receive the smallest grain, without considerable damage and hazardous anxiety; nay that such as are afflicted with difficulty of *respiration*, can by no means endure so much as *fragrant* *suffumigations*, for reasons alledged by us, in our discourse de *Blas humanis*!

tum Localis, tum Alterativi; idque nedum superis, ast etiam inferis. Blas Humanum verò duplex constituitur apud Helmontium nostrum. Unum nempe Naturale, quod singulis visceribus, prima ex conformatione, implantatum radicalior; per energiam radicalem, vel effluviū in corporeū, in partes sui regimini consignatas, aut breuius & magis chuditer: hoc est, potestate absoluta, independenti, non locorum vicinitati, connexioni, aut sapinitati obligata, & quolibet corporis situ æquè truculenter. Per exemplum. In Fœmina hysterica, ex utero (cujus sceptrum unice sam feminei sexus aconomiam, absolute subaltam, serid contendit Helmont) inspiratur blas potestativum in reliqua viscera, quod sicut eorundem primigenium, figuram, officia,

\* Blas importat vim Motus,



imò & crasſin etiam nativam mutet penitus, alienetque pro ſui arbitrio. Unde huic utique radiali Regiminis aſſioni, nequaquam autem putaticis ſcholarum vaporibus, humorumve reverà non-entium exhalationibus, quocunque etiam miasmate contagioſo impregnatis, ritè condonandas decrevit quaſlibet uteri exorbitationes atque indignationes. Alios perinde huiusmodi Blas Humani Naturalis effectus, nobis evidentè ſatis conſpiciendos exhibuit ipſa Natura, in ſingulis Diſteſtionum officiis. Eſt namque conſtans Authoris dogma, Fel & jecur ſua perficere munia, non quidem corporali contactu, congreſſu, aut commiſſione ſui; nec denique amplectendo & recipiendo ſuum intra gremium: aſt per Aporrhæas incorporeas, influxum radialem, ſive Fermentum inſpiratum. Fel enim dimittit fermentale blas in inteſtina: & jecur ſuum in venas meſenterii. Alterum Voluntarium: quod per internum velle ſibi motor exiſtit, ſive quod voluntate animalium ad motum localem dirigitur. Huic autem theſi, ſat firmo tanquam fundamini, Helmont ſuperſtruxit ſuum ariem, ad iſtud ſcholarum axioma dirigendum, quo incaute admodum docere; In omni motu locali ſtatuum de neceſſitate primum motorem immobilem. In ſuo namque tramite, cui titulus Blas Humanum, ab illo ſat demonſtratum exiſtimo, aliquid eſſe in ſublunaribus, quod ſeipſum localiter & alterative moveat, abique Cælorum Blas, & motore immobili naturali. Voluntas enim primum eſt ejuſmodi movens: movetque ſeipſum quoque Ens Seminale, tam in ſeminibus, quam horum conſtitutis. Hinc inſuper quæcunque Inſenſitiva moventur, per quandam veluti Naturæ Voluntatem moventur, habentque ſuas naturales neceſſitates & fines. Fuſor huius paradoxæ explicatio petatur ab ipſo Authore.

If therefore *Suffumigations* and *aromatick exhalations*, ſuch as promiſe a gratefull ſuccour to the Lungs in their oppreſſions, be injurious and burdensome; what will not groſſer and ſlimy *Lambatives* do, though we grant them to arrive at the lower veſſels of the lungs, with all their vertue and efficacy about them? No man, that ever ſaw but one diſſection, will deny, that when ever any thing is ſwallowed down into the ſtomack, at the ſame inſtant the *Larynx* is ſhut cloſe by the *Epiglottis*, or trap doore, that carries the figure of an *Ivy-leafe*; ſo that not the ſmalleſt atome can ſlip into the Lungs. And I have known ſome men *ſtrangled*, who had their *Epiglottis* not ſhut ſufficiently cloſe but on one ſide, by reaſon of a *Convulſion* of one part, and a reſolution or *Paiſie* of the other. ¶

55. And here we are falſe upon the detection of another collateral Error of the Schools; in particular, their unadviſed Aſſertion, that *Lambatives* ſwallowed down gently and by degrees, the head being at the ſame time reſected into a poſition looking above the horizon, deſcend into the Lungs; but not thoſe, that are ſwallowed down greedily, and at once. If ſo, I demand, whether

whether the dog under the dissecting knife, did lick and by degrees swallow downe the coloured liquor; or chop it down at once? To what purpose did the Anatomists poure it into his throat to be drank at one swallow or gulp, if they knew before hand, that it could not fall into the Lungs, unlesse lickt down gently? But letting this *Hypothesis* stand, that the Lungs absolutely abhor the admision of all external things, meer Aer and such as is not incorporated to Fumes and Exhalations onely excepted: and then it will necessarily follow, that whether any thing be lickt down gently, or drank down ravenously at once; yet still the *President* of the *Epiglottis*, or janitor of the Lungs attends the execution of his function, and observes the *Closure* of the *Larynx*; since thereupon depends no lesse then the hazard of life. This, I conceive, may make it indubious to the most prejudicate, that *Lambatives* and *syrups*, though they may, by introducing an *unctuous* surface upon the parts, make them more *smooth*, slippery, and so more fit for the rejection of viscid excrements flowing from the palate and other parts adjacent; yet are they of no small *detriment* to the *stomack*, nor can, in the least degree, or largest latitude of intention, afford ease or benefit in affections of the *Lungs*. But the Schools reply, that the salivous rheume or defluxion, doth *insensibly*, and by its own *spontaneous laps*, or natural tendency, distill into the *Larynx*; and that, in this relation, *Lambatives* must be beneficial and sanative.

56. But neither of these articles can stand; since into what position soever the neck be disposed, or however inflected, yet the same care and warinesse of *Nature* to prevent that nothing drop or insinuate into the Lungs, is constantly continued. I beheld a *Tumbler*, not long since, stand upon his head, his hands and feet inverted, and in that posture drink a glasse of wine. I appeal to *Anatomy*, and willingly submit my hand to the ferula.

57. Many there are, out of whose mouthes, while they sleep, run whole torrents of spittle; who if they chance to sleep in a supine posture, that is on their backs, it instantly happens,

happens, that they must turn themselves on one side, or awake and sit up, *nature* being affrighted by the terror of the *danger* imminent: and if any of the spittle fall accidentally and unawares into the Larynx; thenceforward, untill all be again exploded, they cough uncessantly. But, to come home to the center of the business; what comfort or succour can *sugar*, mixt with the cadaverous *Lungs* of a *Fox*, or imbued with the juice of *Coltsfoot*, adser to the Lungs; when they utterly abhor the intrusion of any forreigner, admit nothing but Aer unlesse by accident and *ex improviso*, and when any thing is entred into their confines, immediately reject it with great anxiety and labour? Can such a remedy suffice to the *restoration* of the decayed *Faculties*? Can this cut up *Catarrhs* by the root, or expunge the *seminal miasme*, or original impression fixt upon the *Archeus*? I professe, on which hand soever I turn me, on what part soever I place my disquisitions, I cannot discover, that the Schools war against diseases, with any other weapons, but the wilde dreams of the Gentiles, or strike at any thing beyond their *effects* and secondary *Productions*, leaving the head and principal *Causalities* unassaulted; and all this, by reason of their ignorance of the *Essence* and *Causes* of *Diseases*. And hence hath the name of *Physician* salne under the facete reprehension of *Comedians*, and this proverbial reproach, that Physicians care not what they should think, what do, or how order their meditations, in order to their obedience unto that strict Precept: *Be ye merciful, as your Father which is in heaven, is merciful*, grown into use. And, as St. Bernard, concerning the *Clergy* feeding upon the sins of the people, in respect they live upon no other revenews, but *Almes*; so I concerning *Physicians*. For they consider not, whether they discharge their duty to the *Commandment*, or satisfie the debt of *Charity*; who banquet and grow fat upon the defections, languors, and infirmities of the people. Often have I pondered, but discover I cannot, how these *Plagues* of *Ægypt*, these clouds of palpable darknesse, were introduced upon the Schools; unlesse from hence, that being

seasoned



seasoned with evil principles, and infected with unjustifiable traditions, they frequently met with *Affections*, which, according to their outward appearance, and without scruple or stricter indagation, they instantly referred to the fabulous scene of *Catarrhs*.

58. For instance, a certain sick person, invaded with a head-ach, soon after feels a dull and ponderous pain in the neck, a difficulty and indisposition to motion; and the leaden plummets of *Morpheus* are too light to draw down the curtains of his eyes; on the neck of these Accidents ensues a manifest pain and imbecillity of the loyns, which seems to be traduced down to the thighs, and thence to make a progress to the legs and feet. Hereupon it is decreed, that *Pain* (since an *Accident* of *inharence*.) cannot *transmigrate* from one subject to another; unlesse something *Material*, successively trickling down from the brain along the muscles of the spine, and by a spontaneous motion arising from its own tendency to declivity, remove from a *superior* to an *inferior* part: which may very accommodately make out the received *Appellation* of a *Catarrh*. It must become our method of exploring *verity*, to examine and detect the dotage and improbability of this perswasion concerning *defluxions*, by the judicial test of *Anatomy*.

59. For if this *dolorifick* matter distill, by successive drops, from the brain by the neck; no man can doubt, but that it must be transported thither, either through the *Ventricles* of the brain, or through the *substance* and *membranes* of the brain, or betwixt the *Pia* and *Dura mater*, or betwixt the *Dura mater* and the *Skull*, or, in fine, betwixt the *Skull* and the *Skin*. For the Consequence is warrantable from a sufficient enumeration of the parts. But, first, not through the *Ventricles* of the brain; since that could not come to passe without the inevitable introduction of an *Apoplexy*, or universal *Palsie*: if the doctrine of the Schools, concerning the origination of these diseases, stand firme. For if the matter of the Defluxion be excluded from the cavities in the fore part of the brain, and thence discharged upon the  
fourth

fourth ventricle, and so carried into the spinal marrow successively; it cannot but horridly offend those noble parts, and being an alien and acrimonious excrement, cause desperate and invincible obstructions, and by consequence an *Apoplexy* or *Palsie*. Secondly, the matter of this Defluxion cannot, *per diand'now*, by *transudation* through the substance of the brain, be first accumulated between the brain and its thinner investment, the *Pia mater*, and thence delaps; so that both Coats may yet keep their continual distance and *separation* from the very marrow of the spine: in regard the defluxion in its descent cannot but commit a *divulsion* and *solution* of unity, in the medullary roots of the nerves, according to their *longitude*; (i. e.) as they run out in their distinct disseminations. Which wanteth not a multitude of absurdities. In like manner, should the Catarrh be rained down betwixt the *two membranes*; each of those slender investments, provided by nature to envelop the spinal marrow, would be *double*: which Anatomical inspection could never yet justify. And should we allow it so to be, it would not onely impede the *motion* of the *Muscles*; but also excite extreme *torture*, and *convulsive retractions* of the Nerves. So there lieth an *Error* in the *Thesis*; since the *Nerve*, indeed, is the *organ delative* of the *mandates* of the *Will*, (i. e.) the mediatory instrument by which the Will transmits her spiritual Mercuries on an errand to the muscles: but not *Executive* of *Voluntary motion*, (i. e.) not the immediate executioner of the commands given out. More plainly thus; the Will is *Queen Regent*; the *Animal spirits*, the *Nuncij*, or *Embassadors*; the *Nerve*, the instrument of their *transvection* or *de-lation* from the brain, or white-hall of the soul, to the member to be employed; and the *muscle*, the *executioner* of her designs. That a Nerve is not the executioner of Voluntary motion, may be clearly argued from hence; that very few nerves, in *thickness* exceed a thread of double twisted silk. Now a Nerve, being inserted into the external part of its peculiar muscle, cannot probably convey the rheume down to the middle of the muscle, without inferring

a *Palsie* of that part, from its own *obstruction*, or a *convulsion* from the *acrimony* and virulency of the *Defluxion*. Again, if they shall affirme, that the *Catarrh* doth trickle down betwixt the *Dura mater* and the *Skull*; I may appeal for decision to *Anatomy*, which autoptically demonstrateth, that the *perforations* of the spondils of the spine, through which the nerves are threaded in their elongations from their original, the spinal marrow, are so exactly fitted to their magnitude, that not a hair can be thrust between, without a sensible *Compression* of the nerve; so that, by consequence, there can be no void space left for the intrusion of a *Catarrh* into the muscles, from the spinal marrow. We add, that though our Adversaries could find out a *place*; wherein this fictitious rheume may be *congregated*; or *passage* for its *defluxion* upon the spinal marrow, and *diffusion* thence through the *perforations* of the spondils into the muscles: yet, we believe, it would amuse their sophistry, to give a plausible reason of the *succeeding progresse* thereof, and fully to make out, how a humor, once delaps'd upon a nerve running out betwixt two spondils, can remigrate, or return back again to invade other nerves successively one after the other. What, doth the wanton rheume grow weary of one nerve, and to satisfy its desire of change, at pleasure remove to another? 'Tis a *Quere* not unworthy a substantial determination, how a deluge of salt rheume can stream along a tender and extremely sensible nerve, without causing a *stupor*, or *dull insensibility*, in that member into which it is inserted? Can it insinuate into the tendinous *head*, and thence creep along into the *tail* of a *muscle*? Can it retreat thence again, to assault other muscles successively, as the situation of the second is more *prone* or *declivè* then of the former, and that then the third, &c? or, if there may be a new supply of the defluxion, constantly succeeding, imagined to flow from parts above, to fresh ones below; how comes it to passe, that the superior parts, first invaded, obtain an immunity from the mischief? For since the rivulet of rheume doth spring from one *fountain*, the *brain*; and run in one



continued *Chanel*, the *spinal marrow*: why should it not rather follow the *old tract*, then wander into a *new*, and undergo the difficulties of forcing, and as it were mining out a fresh current? Why doth it, as if carried on by an adulterous unconstancy, desert its antiently accustomed bed; and affect the embraces of a *fresh*, nay frequently a *feeble* part? Why doth it forsake its frequented quarters, and range in quest of strang and never yet frequented lodgings? Hath it such an Appetite or malicious propensity inherent, that goads it on to variety of objects, whereon to sate its hostility? For conclusion; that this Error can expect no sanctuary, in the possibility of the rheums defluxions between the *skull* and the *skin*; and through the firme substance of the *Muscles*, each being invested with a tunic sufficiently compact and thick: may be amply collected from our precedent disquisitions. ¶

60. All this being summd up, by the impartial Arithmetick of *Reason*, and examined by mature judgement; the total *Product* must amount to this: that there can be no way, medium, connexion, or dependence, by which a *Catarrh* may subsist, in verity. And since no rheume or material principle can be found out to have descended, even in any of those diseases, for whose sake chiefly the Schools first invented this Chimera of *Catarrhs*: Know all the friends of truth, that as often as any peregrine *Aer* or blast, any offensive odor, any putrefactive *Ferment*, or exotick *Seminality* is impressed upon, or conceived in the *Influent spirit*; so often is that contaminate and degenerate spirit excommunicated from the participation of *Vitality* by the severe justice of the incensed *Archeus*. And the *Genius* or disposition of this depraved *Seminality* conceived, is of no lesse power then this, that it can transmit the *Influent spirit*, made an alien to its primitive purity by the assumption of an exotick *Ferment*, rather to parts seated at distance and in the *suburbs*, then such as are neighbours to the *Rialto* or palace of life. As we shall at large declare in our discourses of

of the *Gout*\*, of the *dumvirate*\*, and elsewhere. For thus *Mercury*, externally applied by *Uction*, subtilly runs through all the body and invades the throat, tongue and teeth. Farther, when this vitiated *spirit* arrives at the place, to which it was dispatched; instantly it there imbueh the nutriment of that part with its putrefactive *Ferment*, transplanteth and transformeth it into a conformity or analogy to the idea of the *Seminality*: and that nutriment thus inquinatèd, by successive expirations or *Affusions*, and foreign impressions, doth disorder and pervert the functions of the *digestive Faculty*; and by this means doth not onely generate a plentiful harvest of *Excrements*; but also stigmatize, or impress this depravity upon the *Implantate spirit* of that part, so deeply, that it can hardly be expunged during the whole after life. All which the Schools, like mendicants, precarious desume from the brain; & erroneously impute to their four imaginary *Humors*, and the defuxion of *Rheums*. On which Consideration, my Theory stands point blank in defiance to the doting tradition of *Catarrhs*; as positively denying and wholly subverting their *material Cause*, receptaries or *places of concretion*, *efficient Cause*, and manner of *Generation* and *Defluxion*: and separating the true *Causes*, *Effects*, and method of *Sanation*, far from the ridiculous fictions of a *Catarrh*. ¶

*In tractatu  
(Volute vi-  
ventium mor-  
bus antiquitus  
puratus, nomi-  
nato) ad quem  
He'mont. suos  
hic remittit le-  
flores, Arthri-  
tidis naturam,  
causas, atque  
nativitatem,  
breviter ad hunc  
modum descrip-  
tas videre est.  
Podagra (in-  
quit) est Chara-  
cter morbidus,  
seminalter in  
spiritu vite in-  
sertus, qui sue  
maturitatis ter-  
mini, fructum  
acidum fermenta-  
talem gignit,  
spermaticis par-  
tibus consermen-  
tabilem. Non  
existit ergo Po-  
dagra in cruore;*

multoque minus in excrementis. Verum Podagrici primum agitantur in præcordiis, & tum internas potum atque ciborum, quam externas aeris vicissitudines sentiunt; imò & sæpe has futuras præfagunt. Quare patiuntur febriles motus primum, circa officinam spiritus Vitalis, ac quidem paroxysmi initiis. Etenim primi motus è præcordiis ascendunt, sedem animæ sensitivæ adoriantur. Conceptus namque in præcordiis Character, Lunæ atque Mercurij typos explicat: atque deinde in corde perficitur. Formatus autem sive maturatus Character, spiritum ibidem febrilem induit, quatenus inficit. Qui simul atque acorem symboli vitæ sive fermentalem concepit, motu febrili abigitur squalleus, & ad loca destinata (crudi viz. spermatis in synovia Articulorum) febriliter desertor. Spiritus, inquam, sic infectus, et non humor (quod notandum) synoniam in se transparens, cum Aciditate fermentali coagulatur in gravem opacum. Adeo et præ ponticitatis conceptæ gradus, calores, dolores, tumoresque podagræ distinguantur. Laticem vero adveccari doloris buccina, & per venas dimitti, od eluendi m, certum est. Itaque non quod dolet, quod tumet, vel ardet, Podagra est: sed hujus sunt producta. Neque enim per pilam bombarde sublato pede, ablata est simul podagra, sive Arthritis: siquidem in sensatione per organum sensus, fit tantum consensus partium, &c. Sed horum fides esto penes Auctorem, ¶

\* Lege jus dumviratus Helmentij.

61. By this time, we believe, it is plain and unquestionable, that no salt, acid, sharp, phlegmatick, or Cholerick humor can distil from the brain; but that, whenever the *Influent* spirit, polluted with some alien and putrefactive impression, doth arrive at any part of the body; then doth nature, without delay, send thither the *Latex*, or source of serous humidity, to expung this impression, or at least rinse away the *Excrements*, there growing from the depravation of the *digestive Faculty*. For the *Spirit*, once vitiated by any forreigne *Contagion*, wildly rangeth at pleasure through the *nerves*, *arteries*, yea and the very *habit* of the body; whereupon, the sick seeming to feel as it were the defluxion, or trickling down of a cold rheume, the *brain* is immediately accused as treacherous, and the grand author of this ryot and irregularity in nature. Now since the *Latex* is sent to the part newly invaded by this malignant impression, not as the primitive *Cause* of the evill (though frequently, by accident, it doth foment and aggravate the mischief, and so make the vitiosity more durable) but as a relief, or stream to wash away the impression: hereupon have the Schools, to this day, remained doubtful, and durst never go so far as positively to determine; whether in the *Gout* the *Catarrh* is derived from the *head*, by the *Nerves*: or whether transmitted from the *Liver* onely, by the *Veins*. And thus evident it is, that the Phlegme and Choler of the Schools flow not from one fountain, or Cataract; as though the *brain* were the *Common sewer* of all these impurities. Again, as for the last refuge, whereunto the Schools flye, for protection of their impossible dream of Catarrhs; namely the *Declivity* or downwardness of the situation of the members, as in relation to the brain, and the facility of the passages: it may easily appear to be too rotten and fragile to afford them shelter. Since as in dead bodies there are none of these *respective situations*, but onely in living; so also all motion of humors in the body is immediately caused by the *Influent spirit*, as the onely *impetum faciens*, and mediately derived from the *Principle of vitality* in whose oeconomy the



the *Ascent* of humors is of no more difficulty then the *descent*. For in living bodies, no humor oweth its motion downward, to the declivè tendency of its *Gravity*: but, in impartial truth, to the aim or direction of that *missivè power*, which levelled it at this or that determinate part. Hitherto concerning the *impression* of an *External* depravity upon the *Influent spirit*: it follows that we declare the probability and manner how the same *spirit* may conceive, and as it were hate an *internal* Character, or domestick tincture of corruption. It comes to passe not seldome, that the *Latex* contaminated by the admixture of some forreine *Salt*, doth therewith infect the *Influent Spirit*, so that it instantly becomes degenerate from its requisite simplicity and purity; though not by reason of any external injury of the *aer*, offensive odor, sulphureous *Fume*, &c. but from a *breath* or blast of *Contagion* conceived in the part affected: yea that taking a dislike or abhorrence from the *Latex* (as being polluted, and so uncapable of its vital irradiation) it grows enraged and forgeth within itself a character of anger and reuenge. After this the uncivil *Latex*, like a rude souldier that intrudes himselfe into quarters against the will of the Landlord, forceth itself into the society of the offended *Influent spirit*; and though unfit for its conversation, as well in regard of its *Acidity*, as immoderate quantity, yet it still followeth and hangs upon its skirts. In which relation, the most hopefull remedies for most of these diseases which cause errattick paines, as also for *internall Ulcers*, must be *Baths*, *Sudaries*, and *Stoves* or *Hot-houses*: for by procuring liberall and profuse *sweats*, and by that means exhausting the *Latex*, as the *secondary* and *fomenting* material Cause, they seem more directly perpendicular to health, and conducible to the pacification of *Archeus* his worship; then the more ineffectuall and languid *Solutives* and *Exsiccatives* of the Schools. ¶

Vaine, therefore, is the story of a *Catarrh* arising originally from the stomach into the head: and its *Condensation*, *Concretion*, and *Congregation* in the ventricles of the

the brain. Vaine are the descriptions of its *Defluxion*, between the coats of the *spinal marrow*, or between the *skull* and *skin*, upon the *Muscles*. And, of necessity, vain and deplorable must such *Remedies* be, as are administred when the *Causes* of the *Diseases* are wholly unknown. Vain also are *Cauteries* and *Fontanels*, for the *Revulsion* and *Exhaustion* of *Humors*, that have no real existence in nature. And, to conclude, vain are the *Decoctions* of *China*, *Guajacum*, *Sassafras*, &c. *exsiccating Drinks*; since the evill ariseth, at least is occasionally aggravated by the *Latex*, and must be fomented by any immoderate quantity of humidity. From whence we have a faire opportunity to collect, that sober and parsimonious *drinking* doth very much conduce to health; nay to the cure of *Ulcers* in the Lungs, as also of the *Gout*. Since the *Latex*, which according to the Primitive institution of nature ought to be *insipid*, upon the excessive drinking of eager Wines, such are *French*, *Rhenish*, and *Sherry*, doth acquire a manifest *Acidity*, or sowerneesse, and instantly communicate the same to the blood; from whence proceed *Corrosions*, sharpe *Spasmes* and *Convulsions*, *erratick paines*, and chiefly the *Gout*. But of the history and necessity of this *Latex*, we have written a particular Discourse. ¶

62. You may please to remember, that the *primitive Material* of all concreted substances, is onely *Water*\*: and all fruits or productions of mixt bodies arise from the same principle.

\* De rerum naturalium primordiis, per Mechanicâ Pyrotechniâ experimenta, suo de more, inquirens Author, in tract. de Elementis; duo dumtaxat reperit Primitiva Elementa: Aerem scilicet & Aquam. (Ignem namque Ens Anomalon, & admirabilionis ordinariâ capax: Terram vero, secundarium tantùm elementum, sive fructum ex Aqua, virtute seminum, concretum, eò quod tandem convertibilis sit in aquam, per privationem suæ essentia, esse existimat.) In hanc autem sententiam se incidisse fassus est, exinde quod per Hermetis ignem didicisset, omne corpus visibile, puta saxum, lapidem, gemmam, silicem, arenam, marchasitam, argillam, terram, vitrum, calcem, sulphur, &c. transmutari in Salem actualem: & quod Sal iste, aliquoties cum Sale Circulato Paracelli cogobatus, suam omninò fixitatem amittat, tandem transmutetur in aquam insipidam; & quod aqua ista æquiponderet sali suo, unde manavit. Nec in contrarium valet, quod imperitus aliquis forsan objiciet; Vitrum esse ultimum artis subjectum, quodque nec igne nec

arte

ne delectari, aut in aquam resolvi unquam possit. Erudietur enim, si Vitri pollinem pluri Alkali colliquaverit, ac humido loco exposuerit; mox totam vitrum reduci in aquam limpidissimam: Cui si affundatur Chrysulca, addito quantum saturando Alkali sufficiat, inveniet statim in fundo arenam sidere, eodem pondere, quo prius faciundo vitro aptabatur. Idem etiam sperari possit effectus ex Universalis illo Menstruo, Liquore Alchahest; qui omnia totius universi corpora tangibilia perfectè reducit in aquam diaphanam, absque ulla sui mutatione (i.e. quoad Formam essentialem, sive nativam seminis dotem) virumvè diminutione. Hujus autem stupendissime Magnæ præparationem, à Paracelso, vel Basilio Valentino Monacho olim inventam, et ab Helmontio, veluti Arcanum nemini, nisi dato prius Sacramenti pignore, revelandum, subdole defossam; me aliquando, ubi dabitur occasio, coram mundo liberè promulgaturum, spondeo. ¶

Let us therefore grant, that the *Latex*, being naturally insipid, doth, upon the access and fermentation of any feminality, or fructifying tincture, instantly grow *Acide*. By example, in the beginning of the Spring, if you make an incision in the rind of a *Vine* or *Birch* tree, neer the root, there will distill forth a very great quantity of thin insipid liquor, which is nothing but the water freshly attracted out of the earth: but if the incision be made higher in the stock or branches, then will the liquor be a little Acid. The reason is the same in the *Latex*, which being naturally insipid, doth, if contaminated by the contagion of any ferment admixed, acquire a sensible Acidity, and inherit any foreign quality, or tincture devolved from the vitiosity of our aliment. This *Latex* the Schools have wholly neglected, and indeed because they confounded it with the *Urine*. This a blind and rude method of exploring the secrets of nature, to make no distinction betwixt the *Generatum*, or production, and the *Materia ex qua*, or material cause thereof; no difference betwixt the *Mother* and the *Daughter*; as if the *Mucus* ordinarily dropping from the brain by the nostrils, the *salivous humidity* of the jawes and tongue, the *Water* effused betwixt the omentum, muscles of the belly and the skin, in the dropsie, and the *Urine*, were all one and the same matter, namely the liquor we ordinarily drink. The *Liver* therefore being misaffected, and invaded by any hostile impression, if it found a retreat to the *Latex*, and call back the streams thereof to its own assistance; doth not convert it into,



into Urine, but makes it the material cause of *œdematous*\* Tu-

\*Τὰ ὑδρήματα  
αδρόματα, ab  
moſi, or an *Anaſarca* a.

Hippocrat. lib. de natura hominis, appellantur tumores laxi, molles, indolentes, ad digiti compressionem cedentes, à pituita tenui, seu frigidiore & humidore parte massæ sanguineæ ortum ducentes. ¶ \*Anasarca est tertia hydrops species; quam quod universa corporis moles aqua lenta & concreta suffundatur, Anasarcam & Leucophlegmatiam (turpiter enim hallucinatur Aretæus, in 2. de diuturn. affect. cap. 1. dum discrimen quoddam inter Anasarcam & Leucophlegmatiam imaginatur) Græci nuncuparunt. Illius autem originem & naturam fuisse aperit Hippocrat. lib. α' παδων. ¶

63. I am not a person subject to such extravagancies and wild singularities, as to affirm, that the *Pleurisie*, *Tooth-ache*, and other such maladies, whose tortures were insufferable, were they not in some sort moderated by their acutenesse, or brevity of duration, are no real Entities. For I too well know, and lament their tyranny over us. I admit them as *Diseases*: but oppose the vulgar tradition of the causes, manner, means, waies, end or destinations of *Catarrhs*. Those fictitious and inconsistent causes I deny, and explore other more reall and probable; in whose remove, the direct way to the restauration of *health* doth consist. I acknowledge that any man, upon the rupture of an *Apoſtome* in the Lungs, may die suddenly: yet I positively deny, that a *Catarrh* is the cause of this *Apoſtome*, or that *death* is ushered in by a *Defluxion*. And with much more earnestnesse I deny, that an *Apoſtome* in the Lungs can be generated from vapours exhaled from the *stomack*, and recondensed in the brain. For which reason I account not a *Consumption* the daughter of a *Defluxion* of rheume upon the Lungs; but the genuine issue of their own *Archerus* seduced into irregularity, and a depraved execution of the power delegated to his administration. I conceed that the *Gout* may be præſaged a day or two before the invasion of its paroxysme from the sensation of the motion of the *salt matter* which runs to the joynts like a drop of scalding liquor: but cannot allow a *Catarrh* to be the cause thereof, since I know assuredly that its material principles, manner of generation, waies of distillation and places of concretion and collection, are prodigious figments

figments, irreconcilable to truth. But the *Latex*, ordained by nature to wash away the impurities from all parts official to concoction (like the river *Alpheus* brought by *Hercules* to cleanse the stable of *Augeas*) is of itself *innocent* and *insipid*: but in its course meeting with the pollutions of *saline tinctures*, resulting from impure and inconvenient aliment, it soon degenerates into *hurtfull* and *acrimonious*, and breeds *Apostemes*, *Ulcers*, and *pruriginous maladies*; as the *Itch*, *Scabbs*, &c. I cannot fool my own credulity so far, as to apprehend any probability in the common opinion, that vapours can ascend out of the stomach into the plane of the brain, be there condensed into water, where is a constant *actual heat*; and thence penetrate through the substance and double investment of the brain. Nor can I shake hands with that impertinent heresie of *Paracelsus*, that the aer drawn in by inspiration is carried down directly to the stomach, and other *viscera* of the lower belly: but allow that a very small quantity thereof is insensibly strained through the capillary perforations of the midrife. For in long compression of the breath, neither any considerable intumescence of the Abdomen can be observed; nor doth the breath, upon its effation, smell of any thing contained in the parts below the Midrife. In like manner can no vapours of Wine or other inebriative liquor, arise up to the head, unlesse by the Arteries\*. For whatever procureth vertigoes or giddinesse in the head, swoonings and other intoxicating Accidents, belongs to another Common-wealth, then that Eutopia of vapours. Nor from the *Wombe* can vapours be transmitted into the head; however vulgar *Pathologie* affirms, that wild and durable *perturbations* of the *Animall Faculties*, and a strong *consipation* of reason, are derivatory from *malignant and narcotical exhalations* arising out of the wombe. For those furious notions and actions of the *matrix* are not to be ascribed to any *sympathy* dependent on the necessity of *Passirability*; but to the *menemachy* or civil war of that peculiar Monarchy of the wombe, wherein women seem to be strangled by an ascension [of

\*See Doctor  
Barne in the  
second book  
of vulgar er-  
rors. cap. 6.  
sect. 7. 1 edi-  
tion.

some certain globular body, or lump, up to their throat. This action is a commotion or tumult of the offended spirits residing in that part, or an error in the government of the *Archæus*, or *uterine President* enraged, to whose arbitrary power all parts of the body must doe homage and conform: as I have amply explained in my Treatise called *Ignota actio Regiminis*. For the dominion of which the *Womb* hath over all parts of the body, is no lesse absolute or diffusive, then that whereby the *Testicles* distinguish a Cocke from a Capon, a Bull from an Ox, and a man from an Eunuch; as wil in the Figure of the body, as the blood, flesh, skin, and enmiosis.

64. But in regard all those diseases conceived to proceed from Catarrhs, the contaminated *Latex* hath obtained a peculiar superintendency or domination over the other humors of the body, and responds to the nature of *Water*: therefore doe all *Accidents* accompanying such infirmities observe their periodicall *exacerbations* most toward night; the influence of the *Moone*, *queen regent of all humane substances*, operating those vicissitudes, or causing ebullitions in us at those houres. And these *Accidents* display their hostility most upon the *brain*, weakned by any native or acquired distemper præceding: as also upon the *Nerves* and *Membranes*, as parts whose small stock of *Vital heat* makes them lesse able to resist or subdue the impressions of external Cold. And hence is it, that *Consumptive*, *Hydropick*, *Gouty* and *decaying*, bodies carry an infallible Almanack in their bones, preface change of weather, and by the Augurie of their pains are forewarned of ensuing tempests: which I have, for that reason, Christned *Tortura Noctis*, the torture of night. It is my serious *Ulinam*, and may be many others, that this way of prognostication had not cost us so deare, as the sufferance of such intolerable anguish and anxiety. For almost every week observes unto us, that men once inured to weare the fetters of the *Gout*, or tainted with any imperfection of the *lungs*, yea such as are onely troubled with cornes on their feet, are suddainly awakened out of their pro-



Profoundest sleep, by the twinges and cruell mementoes of their infirmities, against change of weather: and by this smart advertisement can at midnight tell, that *Juno* hath put on her sable weed of Clouds, and that the unconstant winds are tackt about to another point of the Compasse.

65. *Paracelsus* was pleased to opinion, that *Mercury* was Lord Paramont, or *President* over the *Alimentary liquor*, through the whole body: and for that reason, in another place (*de morbis mineralibus*) both in name and reality, he confounds this Planet with the *terrestrial Moon*.

66. But we, on more substantial and precise grounds, stand assured, that each *nutritive humor* of the body doth conform to the regiment, and obey the *alterative influence* of that *seminall part*, unto which it is proximately to be assimilated: nor doe the *liquid substances* in the body hold any correspondence with the Stars, so long as they are not radically inoculated into the stock of *Vitality*, i.e. untill, by the irradiation of the *internal Sol*, or *vital Spirit*, they are rarified and exalted into a fineness requisite to their participation of life. Which is a convincing argument, that the *Marrow in the bones* is an homogeneous part of the body; but no alimentary or liquid substance: since it is evidently subordinate to the Moon; and the brain, to whose influential power the bones are subject. And thus all diseases conceived to tyrannize over man, under the mistaken name of *Defluxions*, as also the *Veneral Contagion*, or *French Pox*, *Contractions* of the sinews, *torments* of the *joynts*, &c. fall under this one generall title or denomination, *Tortura Noctis*: in this interest, that their *Paroxysmes* or periodicall invasions depend upon the motions or ebullitions of the *Latex*, are regulated by the influence of our Moon, and observe their tides or vicissitudes in exact conformity to the various motions, positions, and configurations or reciprocal Aspects of the Planets. ¶

















